INDIAN ECONOMICS
AND
PAKISTANI ECONOMICS

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A. MUKHERJEE AND COMPANY LTD.

College Square
Calcutta—12

PRICE RUPEES TEN ONLY

Published by A. Mukherjee
Two College Square, Calcutta

Printed by P. C. Ray
Sri Gouranga Press,
5, Chintamani Das Lane,
Calcutta—9

FIRST PUBLISHED, JULY 1949

Dedicated to

The Beloved Memory
of My Father.

FOREWORD

Major studies in Indian Economics relate to the pre-partition period, and have therefore lost some of their value since August 15th, 1947. My friend and colleague Dr. B. B. Ghosh has written this book with a view to bringing the subject into the focus of the smaller India of today—politically fully independent but in the economic sense a much more dependent country than heretofore. We are not yet able to assess the full consequences in the economic sphere of the partition of the sub-continent, but we already know that they have changed the whole pattern of India's foreign trade and her balance of payments and considerably modified earlier theories of self-sufficiency. The process of change is not yet at an end, and I do not suppose that Dr. Ghosh would claim that in this respect he has written the last word on the subject. What he has done, however, is to re-write the assumptions essential to a fresh study of the economics of the new India, and in my opinion this feature of his book makes it a valuable piece of pioneering and research, quite apart from the wealth of other information which he provides for the use of the student. Dr. Ghosh has judiciously mixed economic history and economic theory and there is probably no country in the world where the one is being made and the other is being re-cast under such interesting circumstances as in the India of to-day.

GEOFFREY W. TYSON.

Calcutta,
July, 23rd, 1949.

PREFACE

The pattern of Indian Economy has undergone fundamental changes since the partition of the sub-continent. Pakistan emerged as a new country with great hopes and enthusiasm and the economic conditions in Pakistan are also so adjusting as to enable it to take a place of pride among the progressive countries of the world. Although there is a vast literature dealing with the subject of Indian Economics before the division of the country, there is a growing need for a book, which analyses the economies of the two Dominions after partition. I have therefore ventured to undertake the task of producing this work, which, if it proves useful, will satisfy me as an author. It may be observed that the economic features of undivided India, including the various Acts, Rules and Regulations prevail in Pakistan, but modifications and changes uptodate have been incorporated.

I am deeply indebted to Mr. G. W. Tyson, Managing Editor, Capital, for kindly writing a foreword.

I acknowledge indebtedness to all authors of current literature on the subject, especially to Professor C. N. Vakil and Mr. G. L. Bhansal, who have dealt with the economies of the two Dominions after partition. I may just mention that I have used statistical data chiefly from Government publications. My thanks are due to Sri Bhupendra Nath Mukerjee and Sri Sital Chandra Roy Chowdhury for greatly assisting me.

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Calcutta, 24th July, 1949.

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CHAPTER I

DEFINITION AND SCOPE OF INDIAN ECONOMICS

Definition :—Indian Economics means a study of economic conditions in India from the national point of view. It, therefore, includes a close analysis of our economic problems in order to explore suitable remedies, which may enhance the economic well-being of our population.

Indian Economics does not imply the history of Indian economic thought, because it is neither possible to trace as yet the continued and sustained evolution of economic thinking in this country, nor will it be useful to distinguish in a clear-cut way modern economic thinking in this country from that of the estern countries.

Indian Economics should not be used to denote new economic doctrines as distinct from General Economics. This type of misconception developed during the latter part of the nineteenth century, when British rulers tried to practise wholesale the theories of Political Economy in this country without taking cognizance of local peculiarities. Such a policy evoked protests from Indian leaders amongst whom the name of Justice Ranade ranks supreme. In regard to individualism and free competition, nobility of capital and labour, etc., Ranade remarked in his characteristic style, "As these assumptions do not absolutely hold good of even the most advanced societies, it is obvious that in ocieties like ours, they are chiefly conspicuous by their absence. With us an average individual man is, to a large extent, the very ntipodes of the economical man. The family and the caste are nore powerful than the individual in determining his position in ife. Self-interest in the shape of the desire of wealth is not bsent, but it is not the only nor principal motor. The pursuit f wealth is not the only ideal aimed at. There is neither the esire nor the aptitude for free and unlimited competition except ithin certain predetermined grooves or groups. Custom and ate regulation are far more powerful than competition, and atus more decisive in its influence than contract. Neither ıpital nor labour is mobile, and enterprising and intelligent

enough to shift from place to place. Wages and profits are fixed, and not elastic and responsive to change of circumstances. Population follows its own law, being cut down by disease and famine, while production is almost stationary, the bumper harvest of one year being needed to provide against the uncertainties of alternate bad seasons. In a society so constituted, the tendencies, assumed as axiomatic, are not only inoperative, but are actually deflected from their proper direction. You might as well talk of the tendency of mountains to be washed away into the sea, or of the valleys to fill up, or of the sun to get cold, as reasons for our practical conduct within a measurable distance of time." Much water has flown down the Ganges since Ranade wrote and to-day we find that Indian Economic conditions are vastly similar to those of the West and the necessity for separate economic theories as applicable only to India is no longer felt. As General Economics is a study of mankind so far as his economic activities are concerned, its principles and theories with requisite modifications will also hold good in India, because human nature is universally the same in fundamentals. Indian Economics cannot therefore mean simply the study of General Economics with illustrations from the Indian Economic life. It should really comprise a close scrutiny of the applicability of principles and theories of Political Economy in the general well-being of the Indian population.

Scope :—Indian Economics, therefore, includes among other things a study of India's natural and social environments, agriculture, land tenures, co-operative system and industries. Problems of her foreign and internal trade, money, banking, currency and exchange and public finance will also come within the scope of our study.

Definition and Scope of Pakistani Economics :—Pakistani Economics includes like Indian Economics a study of the economic conditions in Pakistan with a view to exploring the possibilities of enhancing the economic well-being of the masses.

After the division of India, Pakistan obtained very little of the prevailing industries and in consequence agriculture occupies the pre-eminent place in Pakistani economics. It may, however, be observed that attempts are being made in Pakistan to develop industries and secure a balanced development of both agriculture

and industries. Although several blueprints have already been drawn up, Pakistan will continue to have predominantly an agricultural interest in view of her vast agricultural lands, which are full of natural gifts. By harnessing properly her agricultural resources, Pakistan is likely to be a resourceful country from the economic point of view, because in modern days of international trade, Pakistan can very well be an economically solvent country by exchanging her agricultural goods with necessary manufactured products. It will be a mistake to neglect her natural wealth by concentrating all attention on dubious industrial projects, especially at this stage, when the industrial development in any country is handicapped by lack of capital equipment, technical personnel, high prices, etc.

CHAPTER II

AREA AND ENVIRONMENT

As we shall base our estimates on the 1941 census, it is necessary to point out that India has now been bifurcated into India and Pakistan. Before division, India contained an area of about 1,581 thousand square miles and measured 2,000 miles from North to South and 2,500 miles from East to West. Of this the Dominion of India accounts for 1,220 thousand square miles (including States) and Pakistan 361 thousand square miles. Provinces in the Indian Dominion comprise an area of 632 thousand square miles, while those of Pakistan 233 thousand square miles.

The following areas are included in the Dominion of India: Madras, Bombay, U.P., Bihar, C.P. and Berar, Assam (excluding Sylhet), Orissa, West Bengal, East Punjab, Ajmer-Merwara, Andamans and Nicobar, Delhi, Coorg, Panth Piploda and States. Sind, North-West Frontier Province, West Punjab, East Bengal (including Sylhet), Baluchistan and States have been incorporated in Pakistan.

Population :—The total population of the Indian Dominion was shown at 319,016 thousand in 1941 and that of Pakistan 69,982 thousand and the corresponding figures in 1948 may be estimated at about 340,000 thousand and 76,000 thousand, respectively.

Geographical Location :—India is naturally situated in an extremely valuable position for trade purposes. She occupies the central position of the eastern hemisphere and controls trade routes, branching out in all directions. Owing to her extensive seaboard, she is really invulnerable in maritime trade. She also bids fair to become the main artery for aerial navigation with the vast development of the air transport.

Harbours :—In spite of a vast coastline, India possesses a few natural harbours which can accommodate vessels of modern days. Barring Bombay, Okha and Cochin, all other ports on the Western coast become virtually inaccessible during the monsoons. The East coast is surf-bound and has no natural harbour. The harbour of Madras and Vizagapatam were built up at a great

cost and attempts are now being made to expand the Vizagapatam port. Calcutta is about eighty miles away from the sea and the port of Calcutta suffers in addition from the formation of sand-bars in the Hooghly. In view of India's vast potentialities in international trade, it is imperative that we must develop more harbours and build up a suitable mercantile marine.

Internal Transport :—As distinct from sea-lanes, India is internally inter-connected by Railways, Roads and Navigable Rivers. In addition to navigable rivers, the Northern part of India provides facilities for construction of railways and roads. The Peninsular region in the South is rugged and possesses mountains and as such is accessible at great costs.

It should be remembered that aviation is becoming increasingly important in both inland and foreign communications.

Himalayan Regions of the North :—India is physically divided into three natural regions, namely, Himalayan Regions of the North, the Indo-Gangetic Plain, and the Peninsula lying South and bounded by Eastern Ghats on the East and Western Ghats in the West.

The Himalayas contain some of the highest snowclad peaks in the world and attract a large number of tourists for their scenic beauties and bracing climate. They provide India with a natural frontier and are a great source of economic resources. The Himalayan region contains rich animal and forest resources. It is also suited to tea plantations. By intercepting rain-bearing clouds of the South-Western monsoon, the Himalayan peaks provide the plains with sufficient rain water. Most of the rivers which flow along the Indo-Gangetic plain derive their perennial flows of water from the melting of the snow on the Himalayas.

Indo-Gangetic Plain :—The Indo-Gangetic plain is served among others by three important rivers, namely, the Indus, Ganges and Brahmaputra. It is easily the most fertile soil in India and extensively cultivated with rice, wheat, sugar-cane, tobacco, oilseeds, tea, jute, etc. The configuration of the soil made easy the construction of railways, roads and navigable rivers. It is therefore no wonder that this region became the seat of the Indo-Aryan civilisation from very early times.

Deccan Plateau :—The Peninsular region is flanked on the East by the Eastern Ghats and on the West by the Western Ghats.

It is bounded on the North by the Vindhya and Satpura ranges. The Eastern and Western portions differ fundamentally from the geographical point of view. The Western Ghats consist of high mountains, which stretch nearly continuously throughout the region and access to inland from the sea is therefore difficult. The high peaks even intercept the rain-bearing clouds and this area is hence subjected to frequent drought and famine. The Eastern Ghats on the other hand have low peaks which are frequently broken by broad valleys which are interlinked with the sea by rivers like the Mahanadi, Godavari. Kistna and Cauvery. This region is therefore extremely fertile and resembles the North. Cotton and Millets are grown largely in the West, while rice, sugar-cane, oilseeds, tea, coffee, tobacco, spices, coconuts and cinchona are extensively grown in the East. The Peninsula also contains large deposits of iron ores, manganese, gold, mica and lime.

Seasons:—Broadly speaking seasons in India may be classified into three, namely, the Hot season before rains and it is usually dry with occasional thunderstorms. Next comes the Rainy season with frequent downpours, but it is otherwise hot. Then follows the Winter with a northern wind and practically no rains. It should, however, be noted that wide variations in seasons are found in different areas.

Soils:—Soils in India may be placed in the following four categories. The alluvial soils of the Peninsular India and of the Deccan Plateau contain the largest coverage and are most valuable from the economic standpoint. Although lacking in nitrates, these have been found rich in phosphoric acid, potash, lime and manganese and are largely suited to the cultivation of Kharif and Rabi crops. The Kharif crop includes the set of crops which are sown in June and harvested in Autumn, e.g., rice, cotton, bazra, etc., while the Rabi crop refers to wheat, barley, linseed, etc., which are sown in September, at the end of the monsoon, and reaped between January and March. Soils of the Deccan proper and also partly of the river valleys of Bombay and Madras are known as the Trap soil of the Deccan. The principal vegetation of this area consists of jowar, bazra, millets and pulses. Crystalline and laterite soils which are rather chemically poor prevail in the remaining parts of India. These are dry and so are generally brought under cultivation with the help of irrigation.

Climate :—It is not possible to describe the climate of India in a single word or phrase, because it varies so widely from area to area. In India, both extremes of tropics and temperate zones are found. At best it can be said that the climate of India is largely semi-tropical. The Peninsula lies within the Tropic, while the Indo-Gangetic Plain lies north of the Tropic of Cancer. Barring the coastline which is milder in temperature, the Peninsula is comparatively hot, while extremes of summer and winter are found over almost the whole of the Indo-Gangetic Plain.

Climate influences greatly the economic life of a country. Diversities of Indian climate account for all kinds of vegetation, cultivation, mineral products and animals in this country.

It was argued at one time that tropical climates favour the earlier growth of civilisation, but are not suited to sustained development, because people generally lose initiative and tenacity owing to easy living, following natural resources. Living in a temperate climate is hard and rigorous and is therefore congenial to the all-round growth of an individual. There is no doubt some truth in the above statements, but it should be remembered that climate is only one of the factors in the progress of civilisation. The decay of the Indian civilisation was due to various other influences and with the emancipation of India, we find that she again bids fair to be a leader amongst nations of the world.

Rainfall :—Indian agriculture is mainly dependent on natural rainfall and consequently its importance on the economic life of the country can be well appreciated if we remember that 90 per cent of our population depend directly or indirectly for their living on agriculture. The rainfall of this country is interlinked with the Monsoons, which are really large formations of sea breeze. Geographically India is part of the monsoon area of Asia and the monsoon season in this country is divided into South-West and North-East periods. The South-West wind after crossing the equator is deflected to the right. It begins from July and lasts nearly up to the end of September. It blows south-west over the Deccan, south over the Ganges Delta and south-east over the Ganges Valley. It gives maximum rainfall to the Himalayas and Western Ghats. The Indus basin receives scanty rainfall, because it reaches there last and stays for a short period. The North-East monsoon brings north-east winds up the Bay of Bengal

from January and continues up to June. It may be pointed out here that the South-West monsoon is primarily important as it provides India with nearly 90 per cent of her total rainwater.

The Indian rainfall is seasonal, as compared with that of England, which gets rain throughout the year. Rain falls in this country in heavy downpours and causes thereby shortage of soil moisture, soil erosion and water-logging.

Different parts of the country receive rainfalls in diverse degrees. Cherrapunji in Assam has an annual rainfall of about 465 inches as compared with less than three inches in parts of Rajputana and Eastern Punjab.

The monsoons being responsible for rains account for diverse degrees of density of population in different parts of the country. Areas in Bengal are densely populated owing to abundance of rainfall, while Rajputana is sparsely populated due to scanty rain water. The monsoons may be said to have also affected social habits to a limited extent. People living in abundant rainfall areas obtain their food easily from fertile soils and are therefore likely to become idle in habits, as compared with those who are accustomed to a rigorous life in areas where rains are scanty and uncertain.

The following table illustrates the area, population and density of Indian Dominion and Pakistan.

(In thousands)

	Area Sq. Miles	Population	Density per Sq. Mile
Indian Union:			
Provinces	630	230,204	385
States	586	88,806	275
Pakistan:			
Provinces	230	65,600	290
States	126	4,378	204

PAKISTAN

Pakistan includes Sind, North Western Frontier Province, East Bengal including Sylhet and Baluchistan and other States.

Karachi is the natural harbour of Pakistan and the bulk of Pakistan's foreign trade is confined to this port. Although Chitta-

gong is in the process of being developed as a major port in Eastern Pakistan it suffers from the bars, which are formed in the Karnafuli.

The five western rivers of Punjab flow down the lower reaches of the Indus into the Arabian sea. The Himalayan rivers are the feeders of important irrigation works of Punjab and Sind.

Eastern Pakistan is endowed with several big rivers, *e.g.*, Padma, Brahmaputra, Megna, etc.

The climate of Western Pakistan differs widely from that of Eastern Pakistan. East Bengal is a land of heat and damp, luxuriant vegetation, rivers, tanks, rice fields, coconuts, betelnuts, etc. It is densely populated by a mild race. Western Pakistan is most arid in summer, but has a bracing cold winter and grows barley and wheat extensively. It is inhabited by a virile and strong population.

From the standpoint of monsoons, Western Pakistan has almost all the features of the Indus basin, while East Bengal possesses nearly all the characteristics of the Ganges Delta. East Bengal is an area of unfailing rainfall, while Upper Sind and Western Punjab are areas of drought and cultivable with irrigation.

CHAPTER III

NATURAL RESOURCES

Economic Importance of Forests:—Forests rank high amongst natural resources of India. Varieties of forests are available in this country. Beginning from bamboos, fern, palm, teak, sal, etc., which are extensively developed in plains, the sub-tropical regions of the Himalayas and other hills are dotted with pines, deodars, firs, chestnuts, oaks, etc.

Forests possess great economic values in addition to their natural beauty. They provide India with useful products like timber and fuels and also furnish raw materials for manufacturing industries. By supplying fodder for cattle, forests help Indian agriculture. It has also been argued that if Indian cultivators can obtain adequate supplies of fuels and woods from forests, there will be a great saving in natural manures, which are now profusely used as fuels. It is also said that forests influence climate, humidity, moisture and temperature. They regulate floods, soils, winds and rainfall to a certain extent.

Forest Conservation and Administration:—In view of the importance of forests, it becomes necessary for every Government to adopt a rational forest conservation policy. Indian forests were open to free exploitation until about 1855, when Governmental control started. Conservators of forests were found at that time in Bombay and Madras. The Indian Forest Department has been growing since then and the Government policy classifies forests under four main heads, namely, (*a*) forests essential for climatic reasons, (*b*) suppliers of valuable timbers, (*c*) minor timbers, and (*d*) pastures or proper grazing grounds. Sometimes a division has been made into Reserved forests in which anything done without permission becomes an offence, and Protected ones, where nothing is an offence unless specifically forbidden. In addition, there are Unclassed State forests in which there is little control of the Government.

The main object of the Indian Forest Administration is to conserve forests from reckless exploitation and to maximise their

productive capacities. Very often it comes in conflict with the Department of Agriculture, which feels that forest authorities are not duly sympathetic to agricultural needs. The Royal Agricultural Commission therefore recommended that there should be a forest utilisation officer in every province, who should look after the development of forests. There should be a classification of forests into a major division under the care of commercial forests and others required for physical and climatic reasons. The minor division should include fuel plantations, village woodlands and wastes. They also recommended the transfer of wooded areas hitherto controlled by the Forest Department to village management under Panchayats or popularly elected representatives as found in the Madras Presidency. It was also proposed by the Commission to institute a course in the agricultural colleges to train new recruits in the Forest service to cultivate a close and genial touch with the Agricultural Department.

The Forest Administration is now working with commendable success. Researches in forests were inaugurated from 1906, with the establishment of the Forest Research Institute at Dehra Dun in that year. Since then many valuable researches have been made and the Department in co-operation with this Institute has succeeded in increasing the productivity of Indian forests and added considerably to better utilisation of forests and their products. It is now alleged that still fuller utilisation of forests in India is being impeded by lack of proper transport facilities and Government's attention in this direction is urgently called for.

Forest Education :—Forest education in India started with the founding in 1878 of a Forest School at Dehra Dun, for the training of forest rangers, but with the establishment of the new Indian Forest College, probationers are now being trained directly for the Superior Forests Services. The original Forest School, established in 1878, came directly under the Government of India in 1884, when it became known as the Imperial Forest College, which trained Rangers for all provinces. In 1912 the Madras Forest College was opened at Coimbatore, serving Madras, Bombay, the Central Provinces, Bihar and Orissa, and the South and Central Indian States, the Imperial Forest College at Dehra Dun serving the rest of India. The Madras Forest College was closed on 1st July, 1939, but was re-opened for Madras candidates

only in 1945. Ranger students from all parts of India are also being trained at Dehra Dun. The College at Dehra Dun has been renamed as the Indian Forest Ranger College. The new Indian Forest College for the training of officers for the Superior Forest Services was opened in 1938.

Forest Areas:—That the total forest areas are unevenly distributed throughout India is illustrated by the following table, which includes figures made approximately to 1947-48.

Province	Reserved forests (sq. miles)	Protected forests (sq. miles)	Unclassed (sq. miles)	Total (sq.miles)
Madras .	15,572	93	...	15,665
Bombay ...	10,563	160	...	10,723
Bengal* ..	6,344	850	..	7,194
United Provinces ...	5,243	527	431	6,201
Punjab* ..	1,487	3,209	823	5,519
Bihar .	1,355	662	2	2,019
Orissa ...	1,395	943	1	2,339
Central Provinces	19,431	..	...	19,431
Assam ...	6,656	72	15,172	21,900
North-West Frontier Province	266	...	12	278
Baluchistan ...	1,745	...	473	2,218
Ajmer-Merwara ..	73	...	...	73
Coorg ...	517	..	...	517
Sind ..	1,052	85	...	1,137
Andamans ..	1,498	..	691	2,189
TOTAL ...	73,197	6,601	17,605	97,403

* Undivided.

Forest Research :—The Forest School established at Dehra Dun in 1878 became also a recognised centre of forest research in 1906. In 1914 the first Forest Research Institute was opened on the Chandbagh Estate, Dehra Dun. The war demand for forest produce emphasised the scope and need for extensive research. Plans were in consequence made for a new Forest Research Institute on the Kaulagarh (New Forest) estate and few miles out of Dehra Dun, and it was opened on the 7th November 1929. The Forest Research Institute is under the administrative control of the President. There are five main branches of forest

research, namely, Silviculture, Forest Botany, Utilisation, Entomology and Chemistry and Minor Forest Products. Much of the actual research work is, however, decentralised and done by local provincial silviculturists in the provinces and the Central Silviculturist co-ordinates their work and acts as an information bureau on silvicultural matters.

Forest Products :—Forest produce is divided into (1) Major produce, namely, timber and firewood, and (2) Minor produce, including bamboos, leaves, fruits, fibres, grass, gums, resins, barks, animal and mineral products, etc. The average annual outturn of timber and fuel from all sources averages about 306 million cubic feet. In the Andamans notable developments have taken place. In the past, extraction of timber was done by elephant dragging and in consequence a fringe of the forests could be touched. Attempts were made in employing American methods of mechanical logging. The costs of extraction, however, by these means proved too high. Recently the problem has been solved by means of light tramways, the trains of trucks being drawn by elephants. It has been found possible in this way to work larger and hitherto inaccessible areas of forests economically. Elsewhere in the sub-continent a great part of the trade in timber lies in the hands of contractors.

Forest Industries :—Forest industries employ a large number of people in India and Pakistan in addition to the jungle population, which is directly dependent on the forests and the large numbers of wood-cutters, sawyers, carters, carriers and raftsmen. Carpenters, wheel-wrights, coopers, boat-builders, tanners, rope-makers, lac-manufacturers, basket-makers, and many other classes of skilled labourers make their living out of forest produce. It is estimated that over a million people are so employed in the two Dominions and nearly a further half million in the States. With the opening up of the forests, the extension of systematic working, the wider use of known products, and the possible discovery of new products, a steady and extensive development of industries dependent on the forests of India and Pakistan may be confidently anticipated in the future.

Forest Revenues :—The growth of forest revenue, expenditure and surplus during the past 70 years in India and Pakistan has been steady. Gross revenue amounted to about Rs. 299 lakhs

a year for both Dominions. The following table illustrates the revenues, expenditures and surpluses:—

Year	Revenue	Expenditure	Surplus
1938-39	3,00,97.367	2,31,30,435	69,66,932
1939-40	3,02,02,818	2,27,44,245	74,58,573
1940-41	3,71,05,052	2,37,63,614	1,33,41,438

Sources of Power :—Coal, woods, oil, alcohol and water are the chief sources of power in India. As the importance of power is vital in national economy, it is useful to appreciate the power potential of India. Coal, woods and oil resources of India have been discussed elsewhere. Investigations are now proceeding to devise scientific method of deriving alcohol from coal on a commercial scale. With a number of big rivers and vast mountain ranges, India possesses vast potentials of water power. Pandit Jawaharlal Nehru aptly remarked, "I see in the Himalayas the greatest reservoir of power in the world." Water-power may be available in India from the rivers and by storing rainfall by construction of dams. There are already some hydro-electric power schemes working in India and they utilise mainly river waters. The first hydro-electric installation was instituted by the Mysore Durbar in the east on the Cauvery river at Sivasamudram in 1902. A similar project was set up by the Kashmir State in the Jhelum river. The Tata Industries Ltd., started a number of major hydro-electric projects along the Western Ghats in Bombay. The first of these was started in 1915 around Lonavala. Then the Andhra Valley Power Scheme was inaugurated in 1922. There is another similar project styled as Nila-mula, which was set up in 1927. Out of the total electric energy generated in India per month of 397·751 million kilowatt-hour, Tata hydro-electric schemes account for about 96 million units per month while the aggregate of all hydro-electric projects is shown at about 201.905 million kilowatt-hour. The Mandi scheme of Punjab came into operation in 1933. Madras started the Pykara hydro-electric scheme in 1933, the Mettur Irrigation project and the Papanasam hydro-electric scheme. The power stations of the Mysore State at the Shimsha Falls and Jog Falls are also important. The Hyderabad Government has also a few similar projects working. It may be mentioned here that cheap power produced under these schemes has benefited both industries as

well as agriculture by improving irrigation facilities. The Government made a comprehensive hydrographic survey of India in 1918 according to the recommendations of the Industrial Commission and envisages vast potentialities of India in this direction.

It is gratifying to observe that our National Government has already embarked on four large river valley projects, namely, the Tungabhadra in Madras, the Bhakra Dam in East Punjab, the Damodar Valley in Bihar and West Bengal and the Hirakund Dam in Orissa. These schemes are meant for the conservation and utilisation of the water resources of the country for purposes of flood control, irrigation, power generation, navigation and allied facilities. It has been urged that the completion of any one of these four projects will provide enough power to begin several heavy industries of economic as well as strategic significance.

It may be observed that the Government has established the Indian Bureau of Mines to plan the exploitation of mineral resources and continued attention is being paid to physical prospecting for minerals, oils, etc. The Central Electricity Commission has been entrusted with the task of preparing an electricity code and revise the Indian Electricity Act of 1910.

Agricultural Products :—A large variety of agricultural products is found in India owing to varying climates and soils. Rice is grown chiefly in West Bengal, Bihar, Orissa and on a limited scale in Bombay and Madras. Wheat is largely cultivated in north-west of India, while millets like bajra and jowar are concentrated in Bombay and Madras. Barley is found in United Provinces and Bihar, ragi in Madras, United Provinces and Bombay, maize in Bihar, Orissa, East Punjab and United Provinces and gram in East Punjab, Bihar, Orissa, United Provinces and Central Provinces. Linseed, sesamum, mustard, rape, castor, gingelly seed, groundnut, etc., are chiefly grown in United Provinces and Bombay. Jute is cultivated in West Bengal, Orissa, United Provinces and prospects of growing jute in Travancore and elsewhere are being investigated. Cotton is cultivated in Bombay, Berar, East Punjab and Madras. Sugar-cane is cultivated throughout the country especially in United Provinces, coffee in Madras and Coorg, tea in Assam, West Bengal and Madras and

condiments and spices in West Bengal, Bombay and Madras. Opium is extensively cultivated in United Provinces, tobacco in Bihar, West Bengal, Madras and Bombay, fodder crops in United Provinces and East Punjab, cinchona in the southern part of India and rubber in Madras and Assam.

Animal Resources:—A great variety of animal species is found in India. Animals are immensely helpful for our agriculture, which is neither mechanised nor modernised. Buffaloes and cows yield milk. The bullock is useful as a draught animal and in the field. These animals along with goats and sheep provide Indian cultivators with practically all his manures. Donkeys and camels are chiefly utilised for purposes of transport. Numerous kinds of fish are available and it is one of the principal diets of the people of West Bengal, Assam and Peninsular regions.

Pakistan : Agricultural Products:—Rice is grown in Eastern Pakistan and to a certain extent in Sind and West Punjab; wheat, millet, barley, maize, gram, cotton and fodder crops in Western Pakistan; condiments and spices, tea, tobacco and jute in East Bengal, sugar-cane in Eastern and Western Pakistan.

Baluchistan is perhaps the only place in the world where grapes are sold at a penny a pound. The different kinds of soil found in the Indus Valley, the mountains and valleys of the Frontier Province, and the plateau of Baluchistan enable Pakistan to grow almost every variety of European fruit and vegetable, in addition to many others peculiar to Eastern countries. The North Western Frontier Province is known as Pakistan's California because it has the same latitude, elevation and variations in climate and produces the same varieties of fruit as California. The total area under fruit cultivation is about 409,500 acres (200,000 in East Bengal, 150,000 in West Punjab, 50,000 in Sind, 8,000 in Baluchistan and 1,500 in the NWFP) and the annual produce is estimated at 2,500,000 tons. Approximately 40 per cent of the fruit is consumed in Pakistan, between 15 per cent to 30 per cent is canned and preserved and the rest, either fresh or dried, is exported to India and other neighbouring countries. Pakistan's fruit industry has a bright future.

Sources of Power:—Pakistan is very deficient in power sources. Although in matters of forest fuels, she is fairly well placed, there is lack of coal, oil and electricity. Excepting small

deposits of coal in Western Pakistan, which are workable at high costs, she has no other coal resources. At present there is some oil boring in Western Pakistan and the Burma Oil Company has been prospecting oil at Shalda-Naddee area, adjoining Tipperah Hills. It is not possible to raise oil at Sitakund near Chittagong as oil tends to evaporate.

Pakistan is also greatly handicapped in matters of electricity. Regarding the hydro-electric supply, Pakistan obtained about 2 per cent of the total generating capacity of the whole of India, but her share in electricity generated by oil comes to 23.8 per cent of the total and by steam to 4.7 per cent. Pakistan is therefore not well placed in regard to the supply of electricity, as her share of installed capacity is about 5.4 per cent of the total installed capacity of the undivided India. The total installed capacity of generating plant in India is about 1,181,752 kilowatts and in Pakistan 69,027 kilowatts.

It is gratifying to observe that the Pakistan Government has undertaken to develop various hydro-electric projects. The Rasul Hydel Scheme for the development of 22,000 kilowatts of electric power is being constructed. Work has begun on a Rs. 10 crore project of damming the Kabul River in the gorges at Warsak, 20 miles north-west of Peshawar and immediate expansion is in progress on the existing Malakand scheme, which in the last 10 years has played a great part in the advancement of the Pathans.

This first hydro-electric power station of the North-West Frontier Province, which is now being doubled in capacity, lies in picturesque surroundings at Jabban on the west bank of the Dargai Nullah, immediately below the famous Malakand Fort, 72 miles from Peshawar. Construction has also been ordered of another 15,000 KW plant, a replica of the Malakand, on the Upper Swat Canal near Dargai. The new Dargai plant, when completed in 1951-52, will be merged into the Malakand Hydro-Electric Scheme, and will, like Warsak, supply surplus power to towns in West Punjab. The possibility of generating electricity at Malakand was first recognized some 35 years ago by irrigation engineers, who proposed the driving of a tunnel under the Malakand pass to take the waters of the Swat river into a canal for fertilizing the Mardan valley. When this tunnel was com-

pleted it was evident that by extending it by another half a mile, a natural fall of some 250 feet could be developed for the production of electricity. Sanctioned in 1934, the Malakand Hydel Scheme took four years to build at a cost of Rs. 1,14,87,602, and was formally opened on April 23, 1938, by a former Viceroy of India, Lord Linlithgow. The designers left space for three more generating sets for future development. One of them is expected to be installed and commissioned by June, 1950, and another in the December of the same year. On the installation of these two sets, the power station will give 16,000 KWs of energy in addition to the standby plant which is capable of yielding 3,200 KWs. Power at Malakand is generated at 11 KW and stepped up to 66 KW and transmitted by a double circuit line to Mardan and thence by a single circuit line to Charsadda, Risalpur, Nowshera and Peshawar. So far 65 important towns and rural centres in the districts of Peshawar and Mardan and in the Malakand Agency have been served by the scheme. But now the 66-KW transmission has been taken to Wah in West Punjab and towards Haripur in the North-West Frontier Province. By the end of March, 1949 the Wah Cement Works will receive energy from this province. The same line will supply power to the Steel Alloy Plant to be installed at Wah by the Pakistan Government. Service to Haripur town and the Central Jail will begin by June this year. A 33-KW transmission system for Swabi and Saidu Sharif, capital of Swat State, is also contemplated.

The requirements of Western Pakistan are much more than the Malakand or Dargai plant will produce. In order to meet the greater part of West Punjab's demand for energy, Warsak, an ideal site for medium size dam on the Kabul river, has been selected for giant hydel works, which will bring revolutionary changes in the life of the people of the North-West Frontier Province and the tribal areas. The Warsak project is expected to cost about 10 crores, including transmission lines through Peshawar to Rawalpindi, where power will be delivered in bulk to West Punjab.

A most welcome feature of the Warsak Scheme is that it will provide water for the irrigation of nearly 60,000 acres on the right bank of the river west and south of Peshawar, belonging to the Mullazai and Afridi tribesmen, and 5,000 acres on the left

belonging to the Mohmands. Besides supplying energy to West Punjab, power will be made available for tubewell development in the fertile Kohat valley, where large subterranean supplies of water are known to exist at reasonable depth, and for extensive industrialization in the North-West Frontier Province.

The Malakand Hydel Scheme linking the Frontier Province's power supply to the West Punjab grid has been inaugurated. This is the first major hydel project to be put into effect in West Pakistan and is only the beginning of a series of hydel extensions which are to supply electricity to the West Punjab, now dependent on the Jogendranagar generating station for its power.

The Government of Pakistan also proposes to construct the Karnafuli hydro-electric scheme in East Pakistan at an early date.

The units of electric energy generated and sold in India and Pakistan are illustrated by the following table:—

Millions of kilo-watt-hours.

	No. of Concerns†				SOLD													
					Domestic Consumption.		Commercial Light & Small Power.		Industrial Power.									
	India & Pakistan. 1	Indian States. 2	Total. 3	GENERATED.‡ 4	Heat & Power. 5	Lights & Fans. 6	Heat & Power 7	Lights & Fans. 8	Low & Medium Voltage Supply. 9	High Voltage Supply. 10	Public Lighting. 11	Tramways. 12	Electric Railways. 13	Irrigation. 14	Public water-works and Sewage pumping. 15	Military Services. 16	Total. 17
1946-47 ..	380	155	535	4,036·2	37·4	297·2	5·6	162·4	389·5	1,753·4	52·1	35·7	226·3	106·9	170·0	63·4	3,350·8
1947-48§ ..	307	157	464	4,280·3	42·4	329·7	56·3	167·5	436·5	1,783·7	52·9	41·1	198·8	135·3	176·8	53·5	3,474·5
October 1947 ..	382	159	541	354·3	3·9	29·7	4·7	13·9	34·3	150·1	4·7	3·9	20·3	6·8	14·5	4·5	291·3
November „ ..	382	160	542	355·0	3·8	28·4	4·7	13·8*	39·7	144·6	4·7	3·8	17·8	11·9	14·8	4·3	292·3
December „ ..	383	161	544	384·3	3·7	28·6	4·8	14·4	37·9	159·8	4·8	4·2	16·9	16·1	14·7	4·4	310·3
January 1948§	307	157	464	360·2	3·2	27·4	4·3	13·5	38·2	159·8	4·4	4·2	17·8	9·0	14·1	3·5	299·4
February „	307	157	464	333·5	3·6	26·8	4·6	13·1	37·9	139·5	4·2	3·9	15·9	9·2	14·0	3·1	275·8
March „	307	157	464	363·6	3·6	26·3	4·3	13·6	37·6	146·4	4·1	4·2	15·4	10·2	14·0	3·5	283·2
April „	309	157	466	379·9	3·8	27·7	4·6	14·7	36·4	159·9	4·3	4·2	15·1	12·6	14·8	3·8	301·9
May „	309	156	465	385·7	4·1	28·9	5·0	14·8	37·2	158·6	4·0	4·3	15·3	12·2	15·6	4·0	304·0
June „	309	156	465	394·4	4·1	29·3	5·1	14·9	37·7	167·0	3·9	4·2	20·4	13·5	15·0	4·2	319·3
July „	309	157	466	403·6	4·1	29·0	4·8	14·7	36·8	177·0	4·1	4·3	20·6	10·1	14·9	4·2	324·6
August „	309	157	466	392·8	4·6	31·9	4·8	15·6	37·0	169·6	4·2	4·3	20·7	6·0	15·2	4·2	318·1
September „	309	157	466	397·7	4·6	32·0	5·2	15·7	36·8	176·0	4·2	4·3	20·4	6·5	14·6	4·3	324·6
October „	309	158	467	396·1	4·4	32·4	4·5	16·2	37·0	169·9	4·6	4·3	20·7	6·5	14·9	4·3	319·7
November „	310	157	467	371·0	4·6	32·7	4·8	15·7	36·1	156·1	4·2	4·3	17·7	10·1	14·6	3·9	304·3

* Excluding Railway, Military and Factory Power Stations; Chola Power Station, being interconnected with the Tata Power System, has been included.

† At the end of period. ‡ Including purchases from non-electric utilities. § Figures from January, 1948 relate to India only.

CHAPTER IV

MINERAL RESOURCES

Economic Significance of Mineral Resources :—India is vastly rich in mineral resources, which are deemed to be sufficient for the growth of a number of metallurgical industries in this country. Our mineral deposits remained practically neglected up to early eighties, when it was a popular misconception that India was poor in mineral resources. The wars of 1914-18 and 1939-45 gave a great fillip to the development of our mineral resources. The Indian Industrial Commission of 1918 commented that mineral deposits of India can easily sustain most of the key industries, barring those which require vanadium, nickel and molybdenum. The following table illustrates the economic value of India's mineral deposits:—

	1945 Value Rs.
Antimony	1,32,640
Apatite	5,240
Asbestos	78,383
Barite	4,26,946
Bauxite	1,31,314
Bentonite	70
Beryl	2,062(b)
Building materials	2,62,57,669
Calcite	5,535
Chromite	6,77,572
Clay	20,34,211
Coal	32,81,09,008
Copper (Refined)	83,70,000
Corundum	1,85,506
Diamonds	1,79,835
Feldspar	9,364
Fluorite	3,506
Fuller's Earth	2,11,943
Gold	3,39,64,974

	1945 Value Rs.
Graphite	1,29,386
Gypsum	4,26,206
Limenite	13,34,293
Iron—	
Pig Iron . .	2,70,98,880
Steel • .. .	24,11,27,760
Kyanite	2,91,580
Lead	11,211
Manganese Ore . ..	48,20,328(c)
Magnesite	4,43,673(c)
Mica	2,44,77,312(d)
Monazite	65,433
Ochres	2,63,846
Orpiment	544
Petroleum	1,35,28,033
Natural Gas Gasoline	855
Ratile	1,03,593
Saltpetre	1,09,815(d)
Sapphire	1,924
Salt	3,14,86,180
Silver	48,622
Steatite	5,61,577
Sulphur	..
Wolfram (Tungsten Ore) ..	40,869
Zircon ..	35,746
TOTAL	74,71,93,444

(b) Excluding the value of 90 tons.
(c) F.o.b. values at Indian ports.
(d) Export values.

Coal :—Coal is easily the most important mineral in India. The Indian coal industry began to develop from the second half of the last century with the growth of the Indian Railway systems, which initially depending upon imports of foreign coal made increasing demands upon indigenous supplies. At present, the Indian Railways depend not only upon the supplies of Indian

coal, they are also the largest customer of the country's coal industry and some of the largest collieries are owned and managed by the Indian Railways to serve their own requirements. Indian coalfields were originally developed by joint-stock companies with British capital, ownership and management. Although at present Indian capital, ownership and management are largely employed, the British element involved in the Indian coal industry is even now quite considerably important. The phenomenal growth of this indigenous industry may be illustrated by the fact that India mined coal of 1·3 million tons in 1884, while the present mined tonnage was shown at 26·60 million tons, valued at about Rs. 39·89 crores in 1948. It is estimated that private capital exceeding Rs. 9 crores has been invested in the Indian coal industry.

The internal consumption of coal has been fast increasing with the development of Indian industries and the requisite internal demand may be put at about 32·25 million tons, rising to about 41·53 million tons by 1956. The following table illustrates the internal consumption of coal:—

(In thousand tons)

Railways	10,540
Admiralty	550
Bunker	1,340
Cotton Mills	2,010
Jute Mills	500
Iron and Steel	3,130
Brick and Tiles	353
Cement	890
Paper Mills	420
Port Trust	163
Inland Steamers	442
Tea Gardens	153
Collieries and Wastages	
Other industries and domestic	4,239
TOTAL	24,730

In addition to meeting internal demands, Indian coal has also an export market. In the past, Indian coal was competing with foreign imports especially from England and South Africa in the domestic market, but it is now gratifying to observe that our domestic requirements are now fully and exclusively satisfied with indigenous supplies. In view of the fundamental importance of this industry as the supplier of industrial fuels, it is imperative to take active steps for its maintenance in a healthy condition. Amongst others, it is necessary to expand overseas markets for Indian coal and encourage by-products like tar, synthetic petrol and fertilisers and develop coal distillation and dye-stuffs industries.

Distribution of Coal Mines :—Coal resources are unevenly distributed throughout the country and are largely concentrated in West Bengal, Bihar and Orissa (the Gondwana coalfields). There are big mines also in Central Provinces, Assam and Hyderabad State. Rajputana, Central India and Bikanir also mine some coal. The discovery of new coal deposits has been reported in Uridhachalam and Cuddalore in Madras and this coalfield is expected to start mining at an early date. It is estimated to yield about 100,000 tons a year in three or four years' time.

The Coal Industry and the State :—The state control in this basic industry is necessary and the Government of India have been gradually extending their supervision over various aspects of this industry. The Indian Coal Committee was appointed in 1924 and it agreed unanimously that quality and price should be properly regulated. It therefore recommended the establishment of a Coal Grading Board, whose certificates would be good regarding the quality. This Board was formed in 1926.

Sir Lewis Fermor, Director of the Geological Survey of India, sounded a warning in 1936 that India was fast exhausting her coal resources which were estimated at about 4,500 million tons and pleaded for their conservation. The Government of India in consequence appointed in 1936 the Coal Mining Committee to investigate this matter and it submitted its Report in 1937. It recommended that stowing should be adopted as a means of conserving coal of good qualities, while second class coal stocks

are unlimited in India. The Government accordingly passed the Coal Mines Safety (Stowing) Act in 1939, which authorised the Mining Inspectorate to enforce stowing whether necessary and ensure the safety of underground workers by construction of protective works. The Act also created a fund by levying an excise duty on coal and coke to be utilised for stowing purposes. The Coal Mines Stowing Board has been instituted to enforce the Act and look after proper utilisation of coal resources.

India's reserves of all workable coals down to 1000 feet depth have been calculated by the Geological Survey of India at 20,000 million tons, and of good quality coals down to a depth of 2,000 feet at 5,000 million tons. Reserves of coking coals for metallurgical use are computed at 1,500 million tons, of which only a portion, about 50 per cent. may be quarried. The known reserves of good coking coal, suitable for metallurgical purposes were estimated by the Indian Coalfields' Committee in the neighbourhood of about 700 to 750 million tons.

The Indian Coalfields' Committee submitted its report sometime towards the end of 1946. It made recommendations in regard to the acquisition of mineral rights, the appointment of a committee to draw up a plan for coal production and transport, investigation into fragmentation of holdings, encouragement of sand-stowing operations, the abolition of excise duty on coal, the creation of a Department of Fuel and Power and the setting up of a National Coal Commission. In regard to nationalisation the Committee expressed the opinion that while the principle was sound in itself it was impracticable until the mineral rights were acquired by the State. The Government of India has decided to set up a National Coal Commission.

In order to meet the coal shortage, the Indian Coalfields' Committee set an annual production target of 32,250,000. The mechanisation of coallieries is urgent to step up production, but mechanisation depends on transport which is the most important single problem, facing the industry. While 3,582 wagons are needed per day to transport 32 million tons from Bengal and Bihar the railways have been able to commission only about 2,700 wagons a day. The Government are meeting the transport problem by laying out more railway lines and the remodelling of stations and marshalling yards.

The decision of the Government of India to appoint a Committee to advise on the measures to be taken for the conservation of metallurgical coal will be welcomed throughout the country. The extent of India's working reserves of metallurgical coal have for long been the subject of controversy, and it is estimated that India's reserves of metallurgical coal are likely to be exhausted within sixty-five years, if no steps are taken from now onwards. The committee is to report by 15th June, 1949. The terms of reference to the committee are to review the publications and recommendations of the Fuel Research Committee, Fuel Research Institute and other research organisations and recommend to Government what legal and executive action should be taken to implement such of the findings of the research bodies as are considered desirable for adoption. The committee will also consider and recommend what results can be achieved through blending and washing of coal, and what measures are needed and the extent of the compulsion which is to be applied, both at the producers' and consumers' ends, for conservation of metallurgical coal with suggestions for making, washing and blending economically feasible. The committee will ascertain what the existing difficulties, mainly arising out of transport limitations, are in the way of increasing the production of good quality metallurgical coal and how to overcome them. It will also estimate the likely increase in the amount of good quality metallurgical coal which the country will require in the next few years.

Not much progress has been made in the utilisation of coal for the manufacture of synthetic oils or dye-stuffs. The Governing Body of the Council of Scientific and Industrial Research at a meeting in February, 1948 set up a Committee to work out details of a scheme for the early establishment of a synthetic oil industry. Second and third grade quality coal would be used; this is an advantage as India's resources in first grade quality coal are limited.

The coal industry continues to be controlled by the Government in matters of price, production and distribution.

That the Indian coal industry requires urgent rationalisation is illustrated by the existence of 724 small collieries, which are uneconomic and raise less than 5,000 tons a year.

The following table illustrates the production of coal in India and Pakistan:—

(In Tons)

Year	Indian Union	Pakistan
1938	28,136,996	...
1945	28,662,401	...
1947	26,769,000	205,910
1948	26,595,533	310,599

Exports :—The following table gives the statistics of exports of coal:—

(In '000 Tons)

	1947-48	1948-49
April	37·62	33·71
May	24·31	74·09
June	32·23	72·18
July	46·43	59·63
August	73·64	119·01
September	30·82	98·10
October	45·50	108·36
November	32·75	108·37
December	47·33	149·50
January	31·87	
February	39·86	
March	42·73	

Pakistan : Coal :—Coal raisings at present are confined to West Punjab and Baluchistan in Pakistan.

Pakistan's annual requirements of coal are estimated at about 3·3 million tons including 1·8 million tons for railways and 1·5 million tons for industrial and other purposes. Pakistan will therefore have a deficit of about 3 million tons a year, which should be imported.

Pakistan's total coal reserves are estimated at only 6·5 million tons. The coal raised in Pakistan is tertiary coal, whose high sulphur content makes it unsuitable for locomotives or mill furnaces. Pakistan will in consequence rely entirely on imports for good coking coal for metallurgical purposes.

It is, however, gratifying to observe that the discovery of coal deposits has been reported at Panjsher near Kabul and in East Bengal.

Iron Ores :—Rich deposits of iron ores are available in India. The following table illustrates the distribution of iron ores throughout India:—

Area	Estimated Reserves (Million tons)
Bihar and Orissa States	8,000
Mysore	150
Drug District, C.P.	175
Bastar State	610
Sandur State	100
Madras (Salem and Trichinopoly)	305
TOTAL	9,340

Iron ores are at present mined in the Singbhum district of Bihar and states of Keonjhar, Bonai and Mayurbhunj in Orissa, where recent discoveries also indicated a range of iron ores extending to over almost forty miles. Iron ores deposits are also being worked in Mysore at the Bhadravati factories. Indian ores which are being mined contain high grade hematites with trifling amounts of magnetite. Excepting a small amount, most of the mined ores are used for smelting in blast furnaces.

Although Indian reserves of iron ores are about three quarters of the U.S.A., the output is comparatively poor. About 2·75 million tons were mined in India in 1938, as compared with 50 million tons in the U.S.A.

The iron industry in India is pretty old and was founded long before any foreign imports reached this country. The indigenous industry has been making phenomenal progress. The

production of iron ores rose from 4,41,574 tons in 1914 to 1,540,849 tons in 1947-48.

There are hardly any iron ore deposits in Pakistan.

The following statistics of imports and exports of iron are given:—

Imports:—

		1946-47	1947-48
Iron Ore—			
Quantity (Tons)	...	54	539
Value (Rs.)	...	18,951	87,379
Pig Iron—			
Quantity (Tons)	...	.	394
Value (Rs.)	...	71	47,034

Exports:—

Iron Ore—			
Quantity (Tons)	...	20	...
Value (Rs.)	...	500	.
Pig Iron—			
Quantity (Tons)	...	8,505	419
Value (Rs.)	...	4,22,275	28,234

Petroleum :—India produced crude petroleum of 66·97 million gallons in 1938 valued at Rs. 1,12,65,000, while the production in undivided India was shown at 97·45 millions in 1944, valued at Rs. 1,78,42,000. Assam is by far the largest and most important oil-bearing area in India. Fields in Assam contain less average crude, but more lubricating oil and wax. There is a large gas-show at Jawalamukhi in the Kangra district in East Punjab and some sources are also reported to exist in C. P.

India is essentially dependent upon foreign imports for her mineral oil requirements, as shown in the following table:—

IMPORTS OF MINERAL OILS IN INDIA.

	1945-46		1946-47		1947-48	
	Quantity (in gallons)	Value (in rupees)	Quantity (in gallons)	Value (in rupees)	Quantity (in gallons)	Value (in rupees)
1. Petroleum, dangerous flashing below 76°F, including petrol, benzine and Benzol (Motor spirit and other than motor spirit.	532,289,934	53,45,68,211	122,462,510	8,55,93,708	108,647,673	8,82,07,247
2. Kerosene	123,641,857	8,04,33,329	161,893,443	8,54,44,498	177,832,903	9,09,68,791
3. Fuel oils (Diesel oils and other fuel oils).	411,316,067	11,45,91,618	318,316,013	7,35,47,177	264,915,759	5,94,98,411
4. Lubricating oils (Batching oils and other lubricating oils).	32,623,746	5,58,77,374	36,670,417	4,80,29,653	53,928,839	7,97,45,669
5. Other kinds (white oils paints, solutions etc.).	978,022,189	70,79,24,005	479,019,357	21,12,45,505	436,556,802	24,88,53,677

It may be observed here that we have got only one refinery in Digboi in Assam. India can save a lot of money if more refineries are started here, because prices of crude petroleum being much cheaper than refined oil, we should be able to import crude oils in large quantities.

Pakistan : Petroleum :—The yield from the Attock oil fields in Pakistan declined from 35·43 million gallons in 1941 to about 11·81 million gallons in 1946 and these fields are reported to show signs of exhaustion, following the small thickness of oil source beds. There are some oil shows in Kohat Salt Range, at Curguri Oba in North Waziristan, in a pass on the borders of Dera Ismail Khan and Bannu district. Some gas-shows are also reported in the Makran Coast and Sind and around Chittagong in East Bengal.

Copper :—India produced copper of about 3,26,017 tons in 1944, valued at Rs. 67,28,000. Excepting 51 tons in Mysore, the entire copper was mined in the Singbhum district of Bihar. India is deficient in this non-ferrous metal, because the total copper ores reserves were estimated at 8,52,300 short tons in 1938 with an average assay value of 2·88 per cent of copper. India manufactures about 6,000 long tons of fine refined copper in a year and this satisfies nearly 20 per cent of our requirements. The copper is milled by the Indian Copper Corporation Ltd., in their factories at Maubhandar, near Ghatsilla in Singbhum. Almost all of this refined copper is converted into brass sheets and circles.

Although some copper ores of low quality have been located in Darjeeling in West Bengal, Kumaon and Garhwal in U. P., Kangra Valley in East Punjab and in Madras and Central India, their economic working has not yet been proved.

Indian copper is nickliferrous in quality and in consequence its value as a conductor of electricity is nil. It is however useful as an alloying element.

India imports large quantities of copper, as shown in the following figures:—

		1945-46	1946-47	1947-48
Quantity (cwts.)	...	307,501	710,319	439,996
Value (Rs.)	...	1,59,22,824	4,33,30,347	3,74,99,703

There are no known deposits of copper ore in Pakistan.

Gold :—India produced gold of 3,21,134 fine ounces in 1938, valued at Rs. 3,04,75,000, while the total production amounted to 1,88,206 fine ounces in 1944, but valued at the higher figure of Rs. 3,55,02,00. Indian production is about 3 per cent of the world's total output of gold. The main gold-producing areas in India are located around the Kolar Gold Fields in Mysore. Some gold is also produced in the Anantapur gold fields in Madras. Though the Nizam's mine at Hutti was opened in 1903, it closed its working since 1920. Negligible quantities are also obtained by washing in Central Provinces and United Provinces. The production of about 4 ozs. in Punjab has been allocated to Pakistan.

The following table illustrates the production of Kolar Gold Fields:—

Company	Current Ore treated Tons.	Gold obtained Fine Ozs.	Old Tailings Treated Tons.	Gold obtained Fine Ozs.	Total Gold obtained for April, 1949. Fine Ozs.	Total Gold obtained for Feb., 1949. Fine Ozs.	Total Gold obtained for Jan., 1949. Fine Ozs.
Mysore ...	11,805	4,723	...	...	4723	3,650	4,683
Champion Reef ...	8,080	4,423	...	...	4,423	4,480	5,694
Ooregum ...	8,002	2,255	...	...	2,482	1,962	2,357
Clean up ...	. .	227	...	. .	...		
Nundydroog ...	11,580	2,949	3,410	98	3,047	2,639	3,892
TOTAL .	39,467	14,577	3,410	98	14,675	12,731	16,626

Mica :—Mica is a key mineral and possesses strategic importance. It is largely used as an insulating medium in the electrical industry. The manufacture of electric fans, cookers and irons requires block mica, which is imported from Brazil, Canada and U.S.A. and is also re-exported in the shape of fine splittings. Railways consume a large quantity for insulation and repairs of electrical apparatus. Mica is useful for the development of wireless telegraphy, radio communication, aeronautical engineering and motor transport. Sheets, tubes, washers and taps are made in the shape of micanite. Ground mica is utilised in paints and

coating composition, as a lubricant in the moulding and vulcanising of motor tyres, etc. Mica is also useful for decoration and medicinal purposes.

India is the chief producer of mica in the world, contributing about 70 per cent of the total output. Bihar supplies about 80 per cent of India's total production. Mica is also found in the Nellore, Salem, Nilgiri and Malabar districts of Madras, Tonk, Jaipur and Udaipur States in Rajputana and Mysore. India produced dressed mica of about 1,59,581 cwts. in 1943 and about 2,50,000 workers are employed in the industry. In view of the importance of this mineral, the Government have been gradually extending their control over this industry. The Mica Enquiry Committee emphasised the importance of grinding in India. The indigenous consumption is estimated at about 5 per cent of our total output and the balance is exported, as illustrated below:—

	1945-46	1946-47	1947-48
Quantity (cwts.) ...	125,031	185,278	256,359
Value (Rs.) ...	2,45,38,615	3,00,08,940	5,65,23,242

Although there are reported to be some deposits of mica in the Hazara district and Chitral State of Pakistan, the mining of mica in Pakistan has not yet been undertaken.

Manganese Ore :—Manganese is an important mineral and principally used in the manufacture of iron and steel, dry cell batteries, chemical, glass and ceramic industries. It is also useful for medicinal purposes. Its alloys are widely used. India is one of the principal producers of manganese ores in the world and contributes about 30 per cent of the total output. Although the quarrying of this mineral started in Vizagapatam in Madras, Balaghat, Bhandara and Nagpur districts of the Central Provinces produce at present about 70 per cent of India's aggregate outturn. It is also mined in the Sandur State of Madras, Bombay, Mysore, Bihar, Orissa and Central India. Reserves of this ore in India are estimated at about 10 to 20 million tons. The total Indian production was shown at 370,980 tons in 1944, compared with 967,929 tons in 1938.

India exports nearly 95 per cent of her total output, mainly to the U.S.A. and U.K. Export figures are reproduced below:—

	1945-46	1946-47	1947-48
Quantity (Tons) ..	184,681	461,500	526,146
Value (Rs.) ..	65,34,100	1,84,14,344	2,48,64,232

The industrial panel on non-ferrous metal industries emphasised the importance of increasing the exports of ferro-manganese rather than manganese ores. India manufactures at present about 20,000 tons of ferro-manganese per year. There are no known deposits of this mineral in Pakistan.

Bauxite :—Bauxite is mainly used for the extraction of alumina, which is required for the preparation of aluminium by electrolysis. It is also utilised for making aluminium salts, *e.g.*, alum and aluminous. It is also useful for the manufacture of artificial abrasives and refractories. It is used as a filtering material for refining kerosene and paraffin wax and is also utilised by sugar refineries.

Formerly most of the Indian bauxite was bought by the petroleum companies and a limited quantity was used for making alum and aluminous cement. At present India is using bauxite for the manufacture of aluminium, whose production from both Indian bauxite and imported alumina is estimated at about 2,400 tons, satisfying 30 to 40 per cent of our requirements.

India produced bauxite of 13,893 tons valued at Rs. 1,31,000 in 1945 compared with 8,243 tons worth Rs. 22,000 in 1933-38. It is largely found in Kapadvanj in the Khaira district of Bombay. Certain quantities are also available in the Jamira Pat Plateau and Ranchi districts of Bihar, Katni in Jubbulpore district and Central Provinces. Indian bauxite is associated with laterite and contains nearly 55 per cent alumina contents. Pakistan possesses no known deposits of this mineral.

Chromite :—India produced 39,555 tons of chromite in 1944, compared with 22,257 tons in 1938. It is located in Mysore, Bihar, Orissa and Eastern States.

It is used for the production of various alloys of chromium with iron, nickel or cobalt. Ferro-chrome and chromium steel is also produced with this mineral. It is also useful for making

chrome bricks and chrome refractories. This metal is also used for the production of salts, chromates, bichromates of sodium and potassium and is utilised in tanning, dyeing and pigment-making processes.

India used to export the entire quantity before the war, but now consumes about 10,000 tons.

High grade chromium ores are located at Hindubagh and Khanozai in North Eastern Baluchistan in Pakistan. The discovery of chromium with a monthly output of about 2,000 tons has been reported in Baluchistan and Kohat.

Magnesite :—Indian production of magnesite rose from 25,611 tons in 1938 to 41,936 tons in 1944. It is found in the well-known chalk hills of the Salem district in Madras and contains 97 per cent of magnesium carbonate. Deposits are also available in Dod Kanja and Dod Katur of Mysore. It is said that valuable deposits exist in the Singbhum district of Bihar and in Idar, Dungarpur State and Ajmere-Merwara of Rajputana. India's deposits are estimated at about several thousand million tons. It may be mentioned that magnesia can be manufactured from magnesium chloride in sea water.

The alloys of this metal are widely used in aircraft parts and in the manufacture of incendiary bombs. Its wires and ribbons are utilised in the radio industry for degassing valves.

Before the war India used to export the entire quantity. The importance of developing a magnesium industry in India should be duly recognised.

Although some deposits of this mineral are available in Baluchistan in Pakistan, they are as yet not accessible.

Gypsum :—The production of gypsum in India rose from 41,557 tons in 1938 to about 83,706 tons in 1944. It is available mostly in Bikanir and Jodhpur States and Trichinopoly of Madras. Some deposits are also found in Garhwal in United Provinces, Jaisalmer in Rajputana, Kashmir, Sirmur, Kathiawar and Cutch.

It is utilised as a retarder in cement and forms 2 to 5 per cent of the limestone used and as such is an essential constituent of cement. It is also used in the manufacture of manure sulphate of ammonia. Plaster of Paris is made from this mineral and it serves as a valuable source of sulphur. It is mentioned that once

of copper ores in Singbhum and Khetri mines of Jaipur. Silver, Graphite. Asbestos, Steatite, China Clay, Ochres, etc., are also found in limited quantities.

Pakistan does not mine any zinc, lead or tin.

Salt :—In addition to its vital necessity in everyday life, common salt serves as an important raw material for the Alkali Industry, being mainly used in Le Blanc, Ammonia-Soda, Electrolytic, Caustic, Glass, Leather, Soap, Textiles, Paper, Ceramic, Enamel, etc. It is extensively utilised in the manufacture of Soda Ash, Sulphate of Soda, Silicate of Soda and Caustic Soda. It is widely used as a preservative and utilised in fish curing, dairying, packing meats, etc.

Although salt is mainly produced in India from sea water and Sambhar Lake, salt ranges are available in Mandi and Sultanpur. Salt is mainly manufactured in Northern India, Rajputana, Khargoda, Bombay, Madras, West Bengal, Travancore and Kathiawad. The major portion of salt in India is obtained by evaporation of sea water on the coasts of Bombay and Madras. Brine salt is obtained from the Sambhar Lake in Rajputana and salt is also brined on the border of the lesser Rann of Cutch.

India produced brine salt of 1,650,000 tons and rock salt 6,000 tons in 1941-42 and undivided India imported 232,000 tons in the same year. The production of undivided India amounted to 1·86 million tons in 1944. India bids fair to be self-sufficient in salt supplies, as the sources of salt production in India are inexhaustible.

The question of making India self-sufficient in salt was referred to the Tariff Board in 1929 and it submitted its report one year later. It pointed out that Bengal consumed about 500,000 tons of imported salt and although price was a determining factor, the Bengal market stressed the importance of "whiteness, evenness of grain and absence of moisture". The Board recommended to the Government the possibility of a fuller development of a salt industry in the country and suggested the consideration of a reduction in railway freight on salt. The Salt (Additional) Import Duty Act was passed in 1931, levying an additional temporary import duty of 4½ annas per maund on all foreign salt except that of Aden. This duty was renewed from year to year and the Supplementary Finance Act of 1931 imposed a surcharge of 25 per cent

on the customs and excise duties on salt. According to the recommendations of the Salt Industry Committee of the Legislative Assembly, the additional duty was reduced to 2½ annas per maund in 1936 and this duty was terminated in 1938. The indigenous production increased from 1·71 million tons in 1930 to 1·95 million tons in 1935, following the protection granted to the industry, while imports decreased from 0·69 million tons to 0·39 million tons.

The Government of India has been taking active steps to make the country self-sufficient in salt by enhancing local production. It is estimated that the Dominion of India requires annually about 6,75,50,000 maunds of salt, out of which about 6,37,00,000 maunds were manufactured in 1948, compared with 4,88,00,000 maunds in 1947. It is anticipated that the country will be able to reach the target of self-sufficiency in 1949.

Pakistan is well placed in the production of salt. In addition to this manufacture of salt by evaporation around Karachi, salt is profusely produced in the Salt Range and the Kohat mines in West Punjab. The salt resources of Kohat are almost inexhaustible.

The Present Position of Salt Industry in Bengal (Undivided) :—Twelve companies have been registered under the Indian Companies Act for the production of salt and about eight of them have already started actual production. Five of these are in 24 Parganas, two in Midnapore and one is in Chittagong. The total production of salt by these factories is about 22,500 maunds annually. The usual process of salt manufacture followed by these factories is that followed in Burma. Only the Bengal Salt Manufacturing Co., Ltd., follows both the Burma and solar evaporation methods in a fifty-fifty ratio and claims that both the methods are economical and may be followed commercially in Bengal.

Mr. Pitt (Mr. C. H. Pitt, General Manager, Salt Range Division, Khewra [Punjab], was appointed to undertake the investigation into the possibilities of salt production in Bengal, Bihar and Orissa in 1932) did not consider the basis of manufacture practised during the days of the East India Company to be of cottage type, as the method followed necessitated the construction of special furnaces and the withdrawal of labour from their homes. The present method involving use of only two chaties and the

household cooking stove is, however, considered by him to be of the cottage type. The present development of salt manufacture on a cottage basis is mainly due to concession afforded by the Gandhi-Irwin Agreement of 1931. Rural workers are in consequence permitted to produce salt in certain scheduled areas of the coastal districts for domestic consumption. They are also allowed to buy and sell salt within these areas without paying any duty.

Prospects of manufacturing salt in Bengal are examined from the standpoint of three processes:—

(*i*) Burma method, *i.e.*, combined solar evaporation and artificial heating;

(*ii*) Solar evaporation—Solar heat and wide velocity.

(*iii*) Vacuum pan evaporation by artificial heat.

The first two methods are suitable for Bengal.

Bengal salt is distinctly superior to salt imported from other Indian sources. Besides, fine boiled salt easily comparable to Liverpool quality is also being produced here.

Ancillary industries will economise costs of production of salt and are thus vitally connected with the development of salt industry. In this connection the question of the possibilities of manufacturing caustic soda and chlorine by utilising brine and of recovery of various salts may be usefully considered.

Statistics of salt imports are reproduced below:—

	1945-46	1946-47	1947-48
Quantity (Tons)	216,651	92,583	378,858
Value (Rs.)	1,79,59,547	74,22,312	2,87,46,645
Share of West Bengal—			
Quantity (Tons) ...	216,651	92,393	362,683
Value (Rs.) ...	1,79,59,317	73,54,228	2,76,52,016

CHAPTER V

POPULATION

Total Population of India:—On the basis of the 1941 census the total population of the Indian Union is estimated at 319,016,000 in 1941 and about 338,162,000 in 1947. The total population in the various Provinces was 230,207,000 in 1941 and 244,019,000 in 1947.

In Pakistan the total population was estimated at 69,982,000 in 1941 and 74,182,000 in 1947, while for Pakistan Provinces the respective figures are 65,602,000 and 69,538,000. The following table illustrates the distribution of population in the Indian Union and Pakistan:—

INDIAN UNION.

Names of Units	Area	Population
Madras	1,26,000 sq. miles	4,93,42,000
Bombay	99,000 „ „	2,08,50,000
U. P.	50,000 „ „	5,50,20,000
Bihar	32,000 „ „	3,63,40,000
C. P. & Berar	28,000 „ „	1,68,14,000
Assam (excluding Sylhet)	2,000 „ „	75,05,000
Orissa	1,000 „ „	87,29,000
West Bengal	37,000 „ „	2,11,95,000
East Punjab	76,000 „ „	1,27,02,000
Ajmer-Merwara	70,000 „ „	5,84,000
Andamans and Nicobar	1,06,000 „ „	34,000
Delhi	3,000 „ „	9,18,000
Coorg	2,000 „ „	1,69,000
Panth Piploda	30 „ „	5,000
TOTAL ...	6,32,030 „ „	23,02,07,000
States	5,88,000 „ „	8,88,09,000
GRAND TOTAL ...	12,20,030 „ „	31,90,16,000

PAKISTAN

Names of Units	Area	Population
Sind	48,000 sq. miles	45,35,000
N.-W. F. P.	14,000 „ „	30,38,000
West Punjab	62,000 „ „	1,57,17,000
East Bengal (including Sylhet) ...	54,000 „ „	4,18,10,000
Baluchistan	54,000 „ „	5,02,000
TOTAL ..	2,32,000 „ „	6,56,02,000
States	1,28,000 „ „	43,80,000
GRAND TOTAL ..	3,60,000 „ „	6,99,82,000

Density of Population :—Among the factors which influence the density of population climate, soil, environment, government, social structure and economic conditions rank high. Normally, other things being equal, a country with rich economic resources will be able to support a large number of population per square mile. It is generally found in practice that the density of population is very high in an industrially advanced country. An agricultural country normally can sustain a larger number per square mile as compared to a country either in a pastoral or hunting stage of development. Although density is closely associated with economic factors, it does not necessarily indicate economic progress. Thus for example Arabia and U.S.A. have nearly the same density of population, but their economic positions are entirely different. The density of population of West Bengal is nearly higher than that of England, but the former is much poorer than the latter.

In the Indian Union, the density in Provinces per square mile was shown at 364 in 1941 and is estimated at about 386 in 1947. Including Provinces and States, the density was 261 in 1941 and is shown at about 277 in 1947.

In Pakistan Provinces the density per square mile is estimated at 282 in 1941 and 299 in 1947, while the respective figures being 194 and 205 for Pakistan Provinces and States. It should be remembered that almost 64 per cent of the total population of Pakistan is concentrated in East Bengal, which is allocated 25 per cent of the total area of Pakistan. The density of population is about 718 in East Pakistan, as compared with 136 in Western Pakistan.

It is found that density is usually high in areas, which are more easily fruitful from the agricultural point of view.

Distribution of Population according to Community :— The following tables give the distribution in 1941 according to communities.

TABLE I

Community	British India (millions)	States (millions)	Total
Hindus { Scheduled Castes ...	39·9	8·9	48·8
Hindus { Others	150·9	55·2	206·1
Muslims	79·4	15·0	94·4
Tribes	16·7	8·7	25·4
Sikhs	4·2	1·5	5·7
Christians	3 5	2·8	6·3
Others	1·2	1 0	2·2
			388·9

TABLE II

	Muslims (millions)	Non-Muslims (millions)	Muslims percentage	Non-Muslims percentage of total.
Indian Union ...	36·8	261·9	12·3	87·7
Pakistan	51·4	19·6	73·1	26·9
Hyderabad ...	2·1	14·2	12·2	87·8
Kashmir	3·1	0·9	77·5	22·5

Distribution of Population between Towns and Villages:— The distribution of population between towns and villages is significant from the economic point of view. The concentration in towns is a sign of economic progress and shows the industrial development of a country, while the congestion of villages exhibits economic backwardness. The industrial progress and economic prosperity of England are clearly disclosed by a large number of population living in towns, whereas India's poverty is illustrated by a huge concentration of our population in rural areas.

In India, the distribution of population among rural areas is far higher than in urban sites. Although the census of 1931 revealed an increase over 1921 in the urban population from 10·2 per cent to 11 per cent of the total population and the census of 1941 disclosed a further rise to 12·8 per cent, India's population remains predominantly rural in character. Villages absorb nearly 87 per cent of the total population of the country. It may be mentioned here that the 1941 census showed a rise of 81 per cent in the urban population over 1931 census's figure against 15 per cent increase in the total population. The following tables illustrate the distribution of population between urban and rural areas and the growth of urban population:—

TABLE I

	Urban		Rural	
	Population (millions)	Percentage of total.	Population (millions)	Percentage of total.
Dominion of India ...	41·0	14	257·0	86
Pakistan	5·9	8	65·1	92
Hyderabad and Kashmir	2·5	13	17·5	87

TABLE II

Year	Rural	Urban	Year	Rural	Urban
1891	90·5	9·5	1921	89·8	10·2
1901	90·1	9·9	1931	89	11
1911	90·6	9·4	1941	87	13

The urban population constitutes about 14 per cent of the total population in the Indian Dominion, as compared with 8 per cent in Pakistan, indicating the comparatively large growth of industries and commerce in the Indian Union.

Though India possesses vast potentialities of town development, it is necessary that we emphasise the importance of a requisite town planning on a scientific basis. Along with the growth of industries, Indian towns should be allowed to develop

on medium-sized patterns to avoid the ills of huge and unwieldy cities.

Distribution of Population according to Occupation :— Agriculture is the main occupation of the population in this country. Though about 10·38 per cent workers are engaged in industries, about 1·5 per cent is supported by organised industries, the rest being occupied in unorganised industries, requiring simple implements or personal or household duties. The administration and defence of the country absorb about 1¼ per cent. The percentage of population engaged in agriculture is higher in Pakistan than in India.

Distribution of Population according to Sex and Age :— In India, the population of males to females continues to increase, as illustrated by various censuses. There were 940 females per every 1,000 males in 1931 and this number decreased to 935 in 1941. This preponderance of males is specially marked in the urban population, because of the migratory nature of Indian workers and the paucity of female employment in cities. This disproportion in our city population accounts largely for the low morals of the urban working class.

The percentage of female workers to the total female population has been worked out at 25 in this country.

Various causes have been assigned to this malproportion of our population. As a deficiency of female births is a universal phenomena, this is corrected in other countries by the higher infant mortality among males than in the case of females, but Indian conditions favour a larger mortality among females. Ere long female children were regarded in this country as a burden due to dowry systems. The Purdah system is unhygienic. Maternal mortality is very high in India and was shown at 24·05 per *mille*. This is again due to the fact that girl wives start bearing children too early. The facilities of suitable maternity arrangements are as yet very undeveloped in this country. Working mothers are not given sufficient rest after delivery. The general poverty of the people does not warrant the provision for pregnant mothers or infants with requisite diets of standard nutritional values.

The age distribution of the population is important because it discloses the working potentials of the country. The following

table illustrates the age distribution of 10,000 males and females of the Indian population by ten-yearly age-groups on the 1931 census basis:—

Age Group	1931 Males	1931 Females
0-10	2,802	2,889
10-20	2,068	2,062
20-30	1,768	1,856
30-40	1,431	1,351
40-50	968	891
50-60	561	545
60-70	269	281
70 and over ..	115	125
Mean Age ..	23·2	22·8

The age distribution of every country can be shown in the form of a pyramid and the Indian age pyramid possesses a broad base due to prevailing high birth rates in this country. The inferior longevity of our population is also indicated by the tapering of the pyramid towards a point more sharply than elsewhere. Relatively very few people live in India beyond the age of fifty. The generally accepted limits for the working population are between the ages of 15 and 60 or 65 in Europe, while Indian limits are between 13 and 40 and the working population of India therefore comes to about 42 per cent of the total population, compared with 52 per cent in France and 63 per cent in England. It is therefore fundamentally important to improve the longivity of the people and diminish death rates in India through extensive measures of public health, sanitation and nutrition. It may also be remembered here that the age distribution of the population is dynamic and liable to changes, according to deaths, births and longevity of the population. The above considerations are equally applicable to Pakistan.

Birth and Death Rates in India:—Barring emigration and immigration which are rather negligible factors as far as India is concerned, the size of our population is essentially determined by births and deaths. India possesses maximum births as well as deaths per year throughout the world and these are shown at 34·3 and 24·9 per thousand, respectively, compared with 15·3 and 12·0 in England and Wales.

The following table illustrates the birth and death rates in India:—

Year	Birth rate	Death rate	Infant mortality	Year	Birth rate	Death rate	Infant mortality
1920	33	31	195	1931	35	25	179
1921	32	31	198	1932	34	22	169
1922	32	24	175	1933	36	23	171
1923	34	25	176	1934	34	25	187
1924	33	28	189	1935	35	24	164
1925	32	24	174	1936	36	23	162
1926	33	25	189	1937	35	22	162
1927	33	23	167	1938	34	24	167
1928	34	24	173	1939	34	22	156
1929	33	24	178	1940	33	22	160
1930	33	25	189				

Although there is a universal tendency towards lower birth and death rates, India's population continues to exhibit its old trend. High death rates in this country are due, among other things, to diseases, mal-nutrition, lack of sanitation and poverty. High deaths amongst females of reproductive ages and children are significant features of India's death rates. Nearly one-fifth of the children die before one year and infantile mortality aggregates about one-fifth of the total deaths in the country. The congestion in cities, early marriage followed by low vitality of mothers, lack of nutritious food, poverty and lack of care have largely contributed to this serious malaisse. There is excessive mortality found among females of child-bearing age.

The net increase in India's population is therefore rather slow as compared with other countries, because high births are followed by high deaths in this country. India's population rose by about 20 per cent between 1872 and 1921 and the 1941 census revealed an increase of 50 millions since 1931. It is argued that political security helped the increase during the later period. The probable natural increment at the present stage of development was put at between 7 to 8 per cent in a decade, by the Census Commissioner for 1921. In recent years, our population appears to be increasing at a rate of 5 million a year.

In addition to the causes of high infantile and female mortality, various other factors are responsible for high death

rates in India. Early and universal marriages following religious injunctions and prevalence of joint-family system which removes economic handicaps to marriage rank early among the important factors. During the most fertile period of a woman's life that is to say between the ages of 15 and 20, nearly eight out of ten girls are married in this country, while the percentage of unmarried women aged 30 in U.K. and U.S.A. is about 41 and 23, respectively.

It may be interesting to observe here that births per *mille* are actually lower in India than in other countries and the following contributory causes have been pointed out. Indian women have lower fecundity as compared with those of European countries and this may be due among other things to poverty, diseases, unhygienic environment, etc. Although the fecundity of Indian women is low, births per woman are comparatively high as most of our women get married during the most fertile period of their lives. Prolonged lactation is also a cause of low births, because breast-feeding continued for a long time impairs the fertility of a woman. Rigid social customs in India very often act as an obstacle to marriage during normal periods. Diseases and poverty have lowered our vitality. The ban on remarriage of widows withdraws a large number of adult women from reproduction in India. The intelligentsia have a tendency to postpone their marriages till a late date, presumably due to economic reasons. Various systems of birth controls are fast becoming popular with the educated class. The same features prevail in Pakistan.

The Problem of Overpopulation :—Is India overpopulated? This is a highly controversial question. Dr. Radhakamal Mukherjee in his book, *Food Planning for Four Hundred Millions,* estimated a food deficiency of 12 per cent for our population in a year of normal harvests. Mr. P. K. Wattal calculated that during 1913-14 to 1935-6 population increased at a rate of nearly one per cent per annum, while the crop production disclosed an average rate of increase of 0·65 per cent per annum. This means that the increase of population has outstripped the production of food. Professor Gyan Chand estimated that the cultivated area increased by 11 per cent, while population multiplied by nearly 21 per cent between 1900 and 1934.

Dr. P. J. Thomas on the other hand argued that between the biennial periods 1920-21 to 1921-22 and 1930-31 to 1931-32, agricultural production increased by 16 per cent and industrial production 51 per cent, while population rose by only 16 per cent. He therefore believes that population has not increased faster than production in a comparative sense and is inclined to hold that production has been keeping pace with population.

Although it is difficult to form any dogmatic conclusion in the absence of reliable statistics regarding production in India, the current events seem to confirm the statement of Dr. Mukherjee. India is now faced with a heavy food deficit, which is being made good by imports of food from abroad at high prices. In addition, the qualitative aspect of our food situation has much deteriorated. There is a terrific shortage of milk, vegetables, fish, eggs, fruits, etc., or in other words it may be stated that the Indian population is severely suffering from lack of supply of a balanced diet. Dr. Mukherjee held that the evil effects of over-population are writ large over the face of the country. The total percentage of cultivated to cultivable land has now reached the figure of 75 to 95 per cent in the Gangetic Delta due to a rise in population and in consequence forests, meadows and marshes are all invaded by the plough, bringing about scarcity of grazing lands and fodder. The increasing fragmentation of agricultural holdings indicates clearly the existence of an overpopulation in India.

Over-population should be regarded either as a state or a tendency or both and it is better to discuss it in relation to an optimum population. "At any given time, or which comes to the same thing, knowledge and circumstances remaining the same, there is what may be called a point of maximum return, when the amount of labour is such that both an increase and a decrease in it would diminish proportionate returns. Just as there is a point of maximum return in each industry, so there must be in all industries taken together. If population is not large enough to bring all industry up to this point, returns will be less than they might be, and the remedy is increase of population; if, on the other hand, population is so great that the point has been passed, returns are again less than they might be, and the remedy is decrease of population." Over-population implies a departure from the optimum in the direction of an abundance of population.

The prevailing conditions in India certainly indicate the evils of an over-population. High births and deaths especially amongst children are definite symptoms of an over-population. Deaths in India are due to positive checks, namely, poverty, disease, famine and insanitation. Preventive checks like late marriages, celibacy and contraceptives are as yet uncommon in this country. On the other hand, early marriage resulting in large female mortality and lack of vitality of women, hypergamy and prohibition of remarriage of widows, which have been operating hitherto as preventive checks will tend to disappear gradually with the progress of social reform and general enlightenment.

The appalling poverty of the Indian people is a clear symptom of our over-population and the remedy consists in keeping births within limits.

It is rather difficult to assess national income per head owing to paucity of statistical data. Even assuming that the per capita income has risen during the past few years, but it remains an inescapable fact that the improvement in economic sector would have been much more pronounced if population were not allowed to grow at the existing rate. India would be a happier country if births were deliberately kept under checks and the country would be spared of the painful working of all the positive checks.

Though India appears to be over-populated from the factual point of view, it is rather difficult to assert the existence of over-population as a tendency. The high rates of infantile and maternal mortality, the growing disparity in the sex ratio between men and women in reproductive age-groups, the increasing number of widows at the reproductive age and a lower fecundity of Indian women are not conducive to a net reproduction.

It may be mentioned here that over-population does not exist in India in an absolute sense. India is a comparatively under-developed country and she can easily support her existing population at a reasonable standard of living, provided India's production potentials are duly utilised.

The Need of the Hour:—Since there is an over-population in our country, what are the actual remedies? In rectifying the present situation, unstinted co-operation between the People and the State is urgently called for.

The obvious remedy is to check the multiplication of numbers. An increase in the standard of living and a diffusion

of general education are potent preventives against excessive births. The National Government should devote all attention to raise the general standard of living in the country by encouraging an all-round increase in production and by devising a better system of distribution of income. The Government should launch in an extensive system of education so that every individual may be compulsorily assured of a minimum standard of education.

Meanwhile country-wide propaganda should be undertaken to preach the doctrine of reduced births. This may be done either by moral restraint, whose scope is likely to be limited in actual practice or through artificial birth-controls. There is a vast scope of success in this regard. People should be taught to use contraceptives on a wide scale. The educated and comparatively well-to-do classes are gradually adopting these artificial measures of birth-controls on an increasing scale. The problem is likely to be difficult with the poor and ignorant masses. In the first place, they are likely to be against these devices owing to deep-rooted prejudices and secondly they will be handicapped by lack of finance. The Government should step forward and try to popularise the use of contraceptives by undertaking vast schemes of propaganda and should provide the masses with these contraceptives at a price which remains within the means of all.

Attention should be paid towards improving the physique, intellect and character of the people and it is in consequence desirable that reproduction should essentially depend on those individuals, who are best suited to serve the country. In India everybody is allowed to marry and get children and there is no bar on the physically unfit, the mentally unsound and the morally degenerate carrying in them the germs of hereditary disease, marrying and perpetuating their stock. Although Indian public opinion is likely to resist any eugenic legislation at this stage, a good deal can be done by propaganda and educating public opinion in this subject. The establishment of clinics for confidential treatment of venereal diseases may also assist in this direction.

One can hardly emphasise the importance of organising the sanitation and public health services in India in order to prevent the heavy toll of deaths which are usually taken by preventible diseases like malaria, cholera, plague, typhus, influenza, small-pox, tuberculosis, etc. The public should be taught the elementary

principles of hygiene and sanitation, so that they may live ordinarily a much healthier life.

Although there is limited scope in inter-provincial migration, some improvement may be effected by a planned distribution of population. The population of over-congested area may be shifted to places, where people can be settled with a chance of earning a decent living. Already the problem of evacuees from Pakistan has forced the hands of the Government to plan their settlement and the authorities should utilise this opportunity of distributing the surplus population of congested areas on a scientific basis.

Pakistan reveals no new feature in this direction.

CHAPTER VI

SOCIAL INSTITUTIONS

Economic Importance of Social Institutions :—Social and religious institutions profoundly affect Indian economic life and a study of our social institutions is therefore of primary significance.

The Caste System :—The Hindu caste system is the outstanding feature of our social institutions. It originated from very early times and persists still to-day. A caste has been defined as a collection of families or groups of families having a common name, which is usually associated with a specific occupation. They claim common descent from a mythical ancestor and profess to pursue the same occupation. They are regarded by outsiders as forming a single homogeneous community.

Division of Castes into Three Types :—Castes have been mainly divided into three categories, namely, the functional, the racial and the sectarian. Functional castes are the most important as they represent various occupations followed by constituent members. Thus, for example, the Brahmins were the priestly castes. The Bania castes represent trading classes and the Sudras served as servants to their superior castes. Thus numerous functional divisions of castes can be enumerated.

Advantages of the Caste System :—The caste system introduces a division of labour, which ensures economic efficiency and stability. Professions become hereditary in practice and the son automatically inherits the secrets of the family profession and learns his trade well in the family environment. The value of transmitted skill was indeed very great in crafts and the caste system ensured easy transmission of such skill and knowledge.

The functional castes are comparable with medieval gilds in Europe and served as beneficent agencies. They provided for training apprentices, prompted good feeling amongst members, settled disputes by arbitration, helped members in distress and regulated wages and profits. At the same time we should

remember that castes are far more rigid than gilds, tabooing intermarriage. Castes are a matter of birth.

That the caste system assisted the collaboration of races and co-operation of cultures during early days of the Aryan invasion is no doubt partially true. It helped the Hindu society from disintegration against political invasions.

Since the caste system determines an individual's occupation at birth, it has so far imparted a certain degree of social stability.

The Analysis of the Caste System at the present time :— The caste system has outlived its utility and is at present a potential evil of great magnitude. It has now degenerated into a volcano of intolerence and oppression and is deterrent to political unity.

By enforcing systems of endogamous marriage, the caste system has brought in racial degeneration.

By determining the profession of an individual at birth, the caste system prevents correspondence between capacity and industrial production. An individual is never allowed to pursue a calling best suited to his aptitude and abilities. In other words, the system tends to place people in wrong places and thereby impairs efficiency. It consequently creates immobility of labour and since an artisan usually employs his own capital, the movement of capital is also jeopardised.

The caste system is necessarily a bar to the introduction of large scale enterprises, which require considerable capital outlay and co-ordination of different categories of labour. Modern economic enterprises would be impossible if labour remains subdivided into rigid watertight compartments.

The caste system perpetuates a sense of inequality, because the people in higher castes move with an air of superiority and do not like to undertake occupations hitherto pursued by castes of inferior classes. This has resulted in acute unemployment for the upper middle classes. It is gratifying to observe that the caste system is fast disintegrating with the progress of education and general enlightenment. The impact of western civilisation upon the caste system has been conspicuous. The self-sufficing rural economy of India has been disrupted by the growth of trade, commerce and transport. By sheer coincidence of economic circumstances, people are now perforce obliged to undertake occu-

pations, which ensure a living. The Government have also helped in the break-up of this medieval relic of the past by recognising the fundamental right of all on the basis of equality. The Government recognises no caste in its service recruitments. The Provincial Governments are moving ahead to remove old obnoxious customs, which banned the entry of so-called depressed classes into temples and places of worship. The work of Mahatma Gandhi for the amelioration of the conditions of the "Harijans" will be easily recognised as mounmental.

The Joint Family System :—The joint family system is a striking characteristic of our country. At any given time, several generations may live together in a single household. An undivided Hindu family is joint in property, food and religion. This system is the basis of marriage, maintenance, inheritance, etc.

Merits of the Joint Family System :—A spirit of sacrifice and selfless service is the basis of a joint family. Everybody works for a common unit. It guarantees to every individual a minimum of subsistence. Anybody born in a family is looked after, be he decrepit, blind or incapacitated. The system acts as a sort of insurance against premature deaths, sickness, unemployment and old age. There is some kind of division of labour in the sense that every individual is allotted work according to his capacity. It also helps agriculture by preventing sub-division and fragmentation of holdings, following laws of inheritance.

It is possible to manage a joint family with a comparatively small income, because there is no multiplication of household equipment and establishment.

A joint family is usually presided over by the eldest living male member. It therefore engenders discipline, sacrifice, reverence and obedience.

Demerits of the Joint Family System :—The joint family system is naturally fast dying out in modern days. It runs counter to modern ideals of any individual. It is fatal to the fulfilment of one's own personality. It destroys initiative and enterprise, which are essential for progress and prosperity. Human nature being as it is, no individual is likely to give his best unless it is followed by individual results and the joint family system is certainly a hindrance in this regard. As individual's earnings are dissipated in a joint family, there is no encouragement for capital

formation nor for any large-scale enterprise. More often than not, it fosters idleness, because all are assured of living from the common pool.

Among other factors which helped the break-up of this old institution, the development of modern transport ranks high. Owing to decay of old occupations, individuals are now compelled to migrate from their ancestral homes for earning their livelihood. Children are sent to towns and cities for education. The impact of western civilisation has helped to revive the growth of individualism to a certain extent. Though individualism has come to stay in this country, it does not mean sheer callousness. Individualism in its real form contain high degrees of self-sacrifice and carries a high sense of duty to others.

The Hindu Laws of Inheritance :—The Hindu Law presumes undivided family property in the absence of a regular partition. Originally property was in the nature of corporate ownership, which was vested in the family and the head of the family managed the property. When the question of alienation arose, conflicting theories were propounded by each of the two leading commentaries on Hindu Law, Mitakshara and Dayabhaga. The sons are the joint-owners of the family property along with the father in the Mitakshara school, while sons become owners only on the death of the father in the Dayabhaga school. This difference has naturally caused different principles of partition and inheritance. If any member of a joint family desires partition, then there can be partition only as between brothers and descendants of brothers under the Dayabhaga system, while under the Mitakshara system there can be a partition even between father and sons as the ownership is jointly in them. Thus there can be no inheritance in a Mitakshara joint family, as the death of a member makes no change in ownership, and property remains undivided in the absence of a partition. In the Dayabhaga system also, no change follows a death unless partition is insisted upon. There is a case of inheritance under the Dayabhaga school when a member dies, the share of the deceased passing on to the heirs. In addition to joint property, individuals can acquire separate property also by his own efforts. The proposed Draft Hindu Code purports to give daughters equal rights with sons.

In actual practice, the Moslem law of inheritance and succession is similar to that of Hindus. The owner of the property has

control over it during his lifetime only under Muslim law. It devolves by succession on an even larger variety of heirs than under Hindu law. The rules of distribution of property under Muslim law depend on both consanguinity and equitable considerations.

In the absence of priomogeniture, the Indian laws of inheritance and succession contain elements of equality and justice. They prevent the concentration of wealth in a few hands. They ensure a stable rural economy by creating independant peasant proprietors. Every body gets something to start with in India. On the other hand, large formations of capital are hindered. Savings become rather difficult as no one gets a big share. Laws of inheritance and succession in India are largely responsible for the excessive sub-division and fragmentation of holdings, which are uneconomic from the point of view of agricultural production. Very often these systems have encouraged litigation, involving unnecessary expenditure and harassment.

CHAPTER VII

ECONOMIC TRANSITION IN INDIA

Economic Transition in India : Its Meaning :—Economic conditions have been broadly sub-divided into two types, namely, the first belonging to the Pre-Industrial Revolution Stage and the second referring to the Post-Industrial Revolution Stage. The first economic order is characterised by the preponderance of customs and status over competition and contract, economic self-sufficiency of villages following lack of transport facilities and predominance of agriculture resulting in an uneven distribution of the population among various occupations. In such a stage of development, barter is practised on a wide scale and cottage industries and handicrafts of small dimensions usually prevail. Free competition and contract are outstanding features of the economic stage, which has passed through the Industrial Revolution. The various parts of the industrial world under such a system are integrated by development of communications and transport. There is comparatively an even distribution of the population between various occupations, and industries are relatively more important than agriculture. A complex system of division of labour is found with concomitant economic gains. Industries are organised on a large scale and there is clearly a growth of capitalists who usually own, control and manage production, while the workers become mere wage earners.

India is steadily passing from the first stage of old economy to the modern system, although even now in various parts of the country, a pure medieval system of economy is found working.

Old Village Economy :—Villages constituted economic units in the old economic order in India. Economic self-sufficiency of a village was conspicuous. Inhabitants of a village belonged to three main categories, namely, the agriculturists, who were either tenants or landlords. They cultivated land and marketed their own products. The village officers numbering two or three looked after the administration of a village. In the old days, most villages had their panchayats which served as a court of

settlement and of justice. The village artisans provided the inhabitants with other necessaries of life. In other words, every village was self-contained from the economic point of view. Needs of the people were fully met from within the village itself.

Money was unknown in a village economy, which was characterised by the system of barter. Custom and Status regulated economic relations rather than competition.

The Village in Transition :—The socio-economic set-up of modern villages is fast undergoing a transformation, although some old features of village economy continue to persist even to-day. Changes in village organisation are due, among others, to administrative centralisation, growth of an individualistic spirit and improvements in transport and communications. The establishment of a stable Central Government has destroyed village autonomy. The corporal life of the past is yielding ground to modern individualism.

Self-sufficiency of a village is now a thing of the past. Villages are to-day linked with the outside world in economic and other matters. Money has substituted the system of barter. The village population has become mobile and frequent changes of occupations are not uncommon.

Transition in Agriculture :—Transition in agriculture has essentially four aspects, namely, commercialisation of agriculture, passing of lands from ryots to money lenders, sub-division and fragmentation of holdings and paucity of rural labour.

The improved transport and communication systems have largely led to the commercialisation of agriculture. The introduction of money and irrigation has been an important contributory factor. The commercialisation of agriculture naturally led to specialisation of crops in different areas.

The sub-division and fragmentation of holdings increased owing to pressure of population upon land.

Rural indebtedness was one of the principal causes, which resulted in transferring lands from cultivators to money-lenders.

The movement of the rural population towards industrial occupations in cities has caused a shortage of labour in villages.

Transition in the Position of Rural Artisans :—Although the position of rural artisans is changing, the carpenter, black-

smith, washerman, barber, potter, etc., are found doing their work in a village. They are now paid in money and their services are neither regulated by custom nor status. Imports of machine-made and foreign goods are gradually replacing the services of village artisans, but they appear to have been affected in different degrees. The hand-spinner has been nearly wiped out, while the weaver continues to hold his ground. The use of modern utensils has seriously affected the position of blacksmiths. Artisans who have lost their trades have become labourers either in villages or towns.

Transition in the Position of Urban Industries :—There were several big towns in India before the Industrial Revolution and these towns were dotted with artisans who plied their trades with their own labour and capital. The Industrial Commission of 1918 remarked, "At a time when the west of Europe, the birthplace of the modern industrial system, was inhabited by uncivilized tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen. And even at a much later period, when the merchant adventurers from the West made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the more advanced European nations." From historical records it is found that Egyptian mumies dating from 2000 B.C. were wrapped in Indian muslins of unparalleled quality. Rome used several Indian manufactures. The existence of a highly developed iron industry is illustrated by cast-iron pillars near Delhi. India produced fine silk goods, woolen shawls, cutleries etc. India exported large quantities of cotton manufactures to Persia, Arabia and Syria and this trade attracted European traders to India. India's fine linens, calicoes, jewelleries, embroideries, woollen and silk goods, etc., underlined the lucrative trade of the East India Company.

The urban industry of India consisting mainly of textiles and luxury wares was better organised than her rural industry during the early part of the eighteenth century. The cotton industry was localised in Dacca, Ahmedabad, Nagpur, Lucknow and Madura. The shawl industry was concentrated in Kashmir and East Punjab. Benares, Nasik, Poona and Ahmedabad were the principal centres of metal industries. Artistic works were produced around Rajputana. India also possessed a flourishing shipbuilding industry. The urban handicrafts were essentially organised on

the basis of trade guilds, which acted as friendly societies. Owing to the prevalence of the caste system, occupations and skills were assured as hereditary gifts.

These urban industries began to decay from the end of the eighteenth century and various causes contributed to their decline. The elimination of the patronage of the courts and of the nobility was one of the main causes of the decline of the urban industries. The introduction of the British rule in India along with the importation of foreign goods hastened the decay of the urban handicrafts. Opposition began to grow in England against East India Company's trade with England from the end of the seventeenth century, because East India Company used to export large quantities of Indian manufactures to United Kingdom. During the first part of the eighteenth century, Indian goods were banned from England by prohibitive tariffs and a determined policy was pursued to dump British goods in India under special advantages. This laid the foundation of the ruin of the Indian handicrafts. Then the Industrial Revolution in England put the last nail into the coffin of Indian industries. It has been aptly said by Mr. R. C. Dutt that "the invention of the power-loom in Europe completed the decline of Indian industries". With the quick development of the means of transport and communications from the middle of the nineteenth century, Indian industries failed to compete with the cheap machine-made foreign merchandise. The old artisans left their occupations and switched on to land. There were large-scale economic dislocations and miseries in consequence of these sudden changes. The British Government in India assisted the ruin of the indigenous industries by giving all kinds of assistance to the importation of foreign goods in this country.

The Industrial Revolution started in India with the transport system and in consequence the results of the Industrial Revolution in India and England were vastly different. Although it meant in England the ruin of handicrafts, it created enormous employments for the people in new industries and factories. The Industrial Revolution meant for England an era of prosperity and power. Excepting transport, the Industrial Revolution in India meant a flood of foreign goods and a complete destruction of the old handicrafts. The urban artisans were displaced from their traditional occupations and went in for agriculture. In England,

the Industrial Revolution signified increased urbanisation, while in India it drifted towards larger ruralisation.

The Industrial Revolution however took a turn for the better in this country from the middle of the nineteenth century. The factory industry began in India and there has been slow but uninterrupted progress in large-scale industry since then. The new form of industry began in the plantation industries especially under the patronage of British capital and enterprise. The example of the European business was quickly followed by Indian commercial interests around Bombay. The foundations of India's two leading indistries were then firmly laid. The Jute Mill Industry was built up in West Bengal essentially by foreign capital and enterprise, while the Cotton Industry of Bombay has been financed and managed from its very inception by indigenous capital and initiative. Then the Industrial Revolution spread to other industries, which are scattered throughout the country. On an examination of the various sectors of Indian industries, it becomes apparent that our industrial progress is rather slow and uneven and the preponderance of foreign capital and management is an outstanding feature of India's industrial development. This is due among other factors to shyness of our capital, lack of modern banking and credit facilities, paucity of technical skill and industrial labour, uneven distribution of natural resources and absence of key industries.

Industrialisation of India is a Settled Fact :—Factory production is to-day found in nearly all sectors of industrial life. Large-scale production with modern mechanical equipment is prevalent in several units of industries. Minute division of labour with all other features of up-to-date production is practised by several units in this country. In spite of advances in industrial and factory production, India is on the threshold of an Industrial Renaiscence. It has been unanimously agreed that India possesses vast industrial potentials and these must be properly developed. Our industrial advance is handicapped by the lack of key industries like machine-making, shipbuilding, high chemicals manufacturing industries, etc. As the salvation of India lies in stepping up the general standard of living, it is imperative to develop our industries on a full scale. The appalling poverty of the masses must be removed and this can be effectively done by increasing

the per capita income through an extensive measure of industrialisation.

The advent of a National Government has raised new hopes and a sense of jubilation is vibrating throughout the country. It may be confidently expected that our National Government will so plan our future industrial development as to secure optimum results. In our industrial planning, attention should be paid to avoid mistakes of the past. Experiences of the West should indicate the way by which we may attain industrial advancement without bringing in its train the evils of overcrowding, exploitation and dehumanisation. Any industrial planning for India must provide for an equitable distribution of the National Dividend amongst the masses, so that every individual in the state is assured of a reasonable minimum standard of living for the fullest development of an individual personality.

Industrial progress of India implies concurrent improvements in agriculture. Industrial advance is likely to help agriculture by reducing the pressure of population on land and making an increased demand for raw materials.

It is erroneously held that industrialisation will ruin cottage industries. On the contrary, cottage handicrafts are likely to benefit from industrial progress. Indian industries will be able to supply cottage industries with improved technique of production and feed them with necessary raw materials. As agriculture will continue to remain a staple occupation in this country, cottage industries will invariably hold ground as a handmaid to agriculture. Cottage industries will continue to enjoy advantages of low costs of production, because the labour will always be drawn largely from the family.

The rise of Gandhian economics with the cult of Khadi and simple living will naturally continue to occupy a portion of importance by toning the rigours of an otherwise closed industrial system.

CHAPTER VIII

AGRICULTURAL PRODUCTION AND EXPORTS

Agriculture : Importance and Main Features :—The pre-eminence of agriculture in India's economy is clearly illustrated by the fact that nearly over 70 per cent of our population are engaged in agriculture and derive their livelihood from the same. In spite of this predominance, Indian agriculture is perhaps in the most backward stage, as compared with any other country. The output per acre in India compares unfavourably with one-fourth or one-third of what is produced in other countries. This low agricultural production is primarily due among other factors to uneconomic holdings, following sub-division and fragmentation, wrong process followed in the rotation of crops, lack of marketing and irrigational facilities, medieval agricultural technique, poor manures and seeds, etc.

As agriculture occupies a fundamentally important place in our national economy, its resuscitation is long over-due. Industries depend on agriculture for the supply of raw materials and the rural population are the principal consumers of manufactured products. India's population look to agriculture for the supply of food. In recent years, India has been paying heavily for imports of foreign food to meet the country's deficit. The following figures of food imports are interesting:—

	Quantity. Tons	Value (In lakhs of Rs.)
1943-44	326,000	8,44
1944-45	727,000	15,76
1945-46	931,000	26,00
1946-47	2,658,000	88,70

Food imports aggregated 4 million tons in 1948-49.

The production of cereals in 1942-43 was 46·735 million tons in India and 11·991 million tons in Pakistan, or in other words it was about 80 and 20 per cent in India and Pakistan, respectively. The Advisory Board of the Imperial Council of Agricultural Research estimated the average production of cereals in undivided

India at about 60 million tons, which give a figure of about 48 million tons for the Indian Union and 12 million tons for Pakistan. After making allowance of about 10 per cent for wastage and seeds, the quantities available for consumption are estimated at about 43·2 million tons in the Indian Union and 10·8 million tons in Pakistan.

It has been estimated that requirements of the Indian Union come to about 45·8 million tons and those of Pakistan 10·03 million tons. Pakistan is therefore likely to have a surplus of about ·765 million tons, while it has been estimated that the normal deficit of India is going to be about 2·5 to 3 million tons of cereals per year and this will cost the country exceeding Rs. 100 crores. In order to put our economy in order it is essential that agricultural production must so expand as to make the country self-sufficient in matters of food.

The expansion of Indian agriculture should proceed simultaneously with that of industries. In order to restore our economy to a normally stable and healthy position, it is necessary to have a balance between agricultural and industrial development.

The following table illustrates the area and yield of cereals in India and Pakistan:—

(In '000)

	Indian Union 1942-43			Pakistan 1942-43		
	Acres	% to Total	Yield	Acres	% to Total	Yield
Rice	59,355	33·4	9,938	19,697	57·0	6,556
Wheat	26,436	14·9	7,380	8,869	25·7	3,862
Jowar	38,717	21·8	7,069	1,295	3·8	292
Bajra	23,528	13·3	4,133	2,819	8·2	599
Maize	7,062	4·0	2,495	1,260	3·6	482
Barley	7,262	4·1	2,359	561	1·6	193
Ragi	5,826	3·3	1,701	19	0·6	6
Small Millets	8,945	5·0	1,560	9	0·3	1
Total	177,507		46,735	34,529		11,991

Remedy Lies in Intensive Cultivation :—The following table indicates that the scope for extensive cultivation is rather

limited. Even in bringing the available cultivable land under production, a great difficulty is likely to be encountered with regard to the supply of labour, especially in areas like Assam. Attention should therefore be concentrated on improving our agricultural production through intensive cultivation. It may be remembered that in Japan a population of nearly 56,000,000 is supported on 17,000,000 acres of cultivated land and this means one-third of an acre per head compared to India's five-sixths of an acre. India's agriculture should expand through scientific methods of cultivation, better selection of seeds, irrigation, construction of river valley projects, etc.

		Indian Union	Pakistan
Area under cultivation (in thousand acres)	(1938-39)	285,943	53,483
Area under cultivation per head (Acres)	(1941)	0·89	0·76
Do. do.	(1947)	0·85	0·72
Net area sown (in thousand acres)	(1938-39)	235,074	42,645
Net area sown per head (acres)	(1941)	0·74	0·61
Do. do.	(1947)	0·69	0·56
Area under food grains (in thousand acres)	(1938-39)	198,009	37,048
Area under food grains per head (acres)	(1941)	0·62	0·53
Do. do.	(1947)	0·58	0·49
Area under cash crops (in thousand acres)	(1938-39)	36,965	5,572
Area under cash crops per head (acres)	(1941)	0·12	0·08
Do. do.	(1947)	0·11	0·07
Area under forests (in thousand acres)	(1938-39)	81,786	5,521
Area under irrigation (in thousand acres)	(1939-39)	45,679	18,748
Area irrigated by Government canals (in thousand acres) ...	(1938-39)	13,990	14,379
Cultivable waste (in thousand acres)	(1938-39)	88,462	25,016

Analysis of the Main Crops of India :—Among food-crops, rice ranks easily first and then follow wheat, jowar, bajra, maize, barley, ragi and small millets. Among non-food crops, oilseeds,

cotton, sugar-cane, tobacco and jute come in order of importance. The following table shows the areas under major crops in India and Pakistan—

1938-39 (In '000 acres)

	Indian Union	Pakistan
Foodgrains (including gram and pulses) ...	198,009	37,048
Oilseeds	22,872	1,499
Cottons	17,796	3,568
Jute	889	2,276
Sugar-cane	2,833	461
Tobacco	938	352

Rice :—Being a staple food of the people, rice is grown extensively in India. It occupies about 59,656,000 acres and yields an annual output of about 18,760,000 tons. It is grown mostly in the wet and moist areas. Paddy is largely cultivated in West Bengal, Bihar, Orissa, Madras, United Provinces, Central Provinces, Assam and Bombay. Being essentially a winter crop, it is harvested generally in December and January. India grows varities of paddy throughout different areas, according to distinctive soils and climate. Progress in the paddy crop has been rendered rather difficult by the complexities associated with the cultivation of different categories of paddy. The Imperial Council of Research has inaugurated a standing committee on rice according to the recommendations of the Crop Planning Conference of 1934, and conspicuous progress has been lately made on rice research.

India's exports of rice have become negligible amounting to about 1 per cent of total production since the separation of Burma in 1937. India exports rice chiefly to Ceylon, Arabia and certain African territories. India also imports a large quantity of rice mostly from Burma.

In order to protect the Indian rice-grower, a protective duty of annas twelve per maund was imposed on broken rice from April, 1935. It checked imports from Thailand, which declined

from 283,000 tons in 1934-35 to 18,000 tons in 1936-37. The following statistics of imports and exports of rice are given:—

	1945-46	1946-47	1947-48
Imports (in Rs.)	40,90,053	3,63,86,024	9,05,61,623
Exports („)	1,17,18,550	7,562	1,757

Rice is extensively grown in Eastern Pakistan and to some extent in Western Pakistan. Other features follow largely the Indian trend.

Wheat :—Wheat cultivation covers 20,207,000 acres and yields an annual outturn of about 5,346,000 tons. It is a rabi crop being sown from October to December and harvested from March to May. It is the principal food of the inhabitants of East Punjab and United Provinces.

There was a phenomenal increase in wheat cultivation since 1914-18 and India used to export considerable quantities of wheat. In order to protect Indian growers, import duties on wheat and wheat flour were levied from time to time. A duty of Rs. 2 per cent was imposed in March, 1931 under the Wheat Import Duty Act and this duty was reduced to Rs. 1/8 in April, 1935 and Re. 1/- in April, 1936. This import duty expired in March, 1937 owing to improved prices. Again an import duty of Rs. 1/8 per cent on wheat and wheat flour was levied by the Indian Tariff Amendment Act of January, 1939 for a temporary period extending to March, 1940 and this period was further extended to March, 1941. At present, India is in acute shortage of food and large imports are being brought into the country to meet our food deficits. The statistics of imports and exports of wheat are reproduced below:—

	1945-46	1946-47	1947-48
Imports (in Rs.)	8,77,34,948	11,43,79,653	9,60,19,041
Exports („)	3,10,826	12,137	3,473

Wheat is widely cultivated in Western Pakistan, where it is also the staple diet of the people. The wheat cultivation received

a great stimulus from improved transport and irrigation, especially in the case of the new canal colonies of West Punjab.

Barley :—Barley is grown largely in United Provinces, Bihar and East Punjab. Production is chiefly consumed within the country, leaving little surplus for exports. India produces about 2,488,000 tons on 7,127,000 acres.

Barley is consumed by both human beings and cattle. The following statistics of imports and exports are given:—

	1945-46	1946-47	1947-48
Imports (in Rs.)	...	40,32,822	60,23,248
Exports („)	450	...	...

Jowar and Bajra :—Jowar and bajra occupy about 41,894,000 acres of cultivated area and bajra yields an annual output of about 2,525,000 tons. Jowar and bajra are largely consumed in Madras, Bombay and Hyderabad. Jowar is grown chiefly in Hyderabad, Bombay, Madras, Central Provinces and Berar and United Provinces, while bajra is cultivated in Bombay, East and West Punjab, Madras, United Provinces and Hyderabad. Bajra is a Kharif crop, while jowar is both a Kharif and a *rabi* crop. The following figures of imports are given:—

	1945-46	1946-47	1947-48
Imports (in Rs.) ...	11,790	32,509	54,10,569

Pulses :—Pulses are grown extensively throughout India and are largely consumed within the country, leaving limited scope for exports. They are chiefly grown in United Provinces, East Punjab, Bombay, Central Provinces. Gram occupies the leading place among pulses in India. The following figures of imports and exports are given:

	1945-46	1946-47	1947-48
Imports (in Rs.)	609	70,21,678	1,83,05,383
Exports („)	1,43,950	...	120

Although Pakistan grows pulses widely, it is chiefly concentrated in West Punjab and East Bengal.

Miscellaneous : Food Crops :—India grows a variety of vegetables, fruits, condiments and spices in different parts. With the division of the country, India has lost the chief source of fruit cultivation. In order to meet the deficit in fruit supplies, it is essential that great attention should be paid to encourage the development of a fruit industry. Potatoes, onions, cabbages, cauliflowers, turnips, beets, brinjals, tomatoes, etc., are grown in abundance, but the vegetable cultivation is rather unevenly distributed throughout the country. Big cities usually provide good markets for both vegetables and fruits and it is found in practice that big towns in India are desperately short of these supplies. There lies a great scope for the expansion of both fruit and vegetable cultivation. It is worth serious consideration, whether planned cultivation of fruits and vegetables around the big cities of India can be undertaken. This will help to absorb a large number of people especially refugees in remunerative occupations. In order to make such fruit and vegetable industries a success, it will be necessary to provide for scientific picking and packing, improved transport facilities and amenities of cold storage. It will also be essential to develop simultaneously subsidiary industries like dried fruit, jelly, jam and kindred industries. There is also a large cultivation of condiments and spices in India. Amongst notable spices, peppers are chiefly grown in Travancore. Malabar, South Kanara, Coorg and West Bengal, chillies in Madras, West Bengal and Bombay, ginger in Malabar coast, Surat, and West Bengal, cardamoms in Madras, Travancore, Mysore, Coorg and Bombay, betel-nut in Madras and West Bengal and cinamon and cloves in Western Ghats. Exports of spices aggregated over 518,000 cwt. in 1946-47 and the total value of exports of spices amounted to Rs. 6,38,32,352 in 1947-48

Pakistan is well placed in miscellaneous food crops especially in fruit cultivation and presents almost all features, which are found in India.

Oilseeds :—India grows oilseeds of various categories. *e.g.*, linseed, sesamum, mustard and rape, coconut, groundnut, cotton

seed, castor, etc. The following table illustrates the area and yield of oilseeds in India and Pakistan:—

	Indian Union	Pakistan
GROUNDNUT—		
Acreage	8,437 (1,520 Hyderabad)	2 (East Bengal)
Yield (tons)	3,196 (537 Hyderabad)	Negligible
SESAMUM—		
Acreage	4,116 (451 Hyderabad)	215
Yield (tons)	364 (29 Hyderabad)	32
RAPE AND MUSTARD—		
Acreage	4,409 (9 Hyderabad)	1,199
Yield (tons)	694 (·5 Hyderabad)	232
LINSEED—		
Acreage	3,816 (463 Hyderabad)	78
Yield (tons)	430·5 (40 Hyderabad)	14·5
CASTOR SEED—		
Acreage	1,194 (550 Hyderabad)	5
Yield (tons)	111	Negligible

Taking the year 1938-39, it is found that out of the total area under oilseeds, 35 per cent was concentrated in Madras, 15 per cent each in Bombay and Central Provinces and Berar, 9 per cent in Bihar, 7 per cent in United Provinces, 2 per cent each in East Punjab and West Bengal and the balance scattered over other areas. India is the largest single producer of castor seed in the world and possesses more than half the world's total acreage under this oilseed. The Central Agricultural Department estimated India's production at about 215,000 tons against recorded production of about 150,000 tons and this estimate compared favourably with the world's total output of 350,000 tons. Regarding other oilseeds, India produces nearly more than one-third of the world's groundnuts and one-fifth of world's total output of linseed.

Linseed is grown chiefly in Central Provinces, Bihar, United Provinces, Hyderabad, Bombay and West Bengal, sesamum in

Madras, Central Provinces, Bombay, Deccan, United Provinces, East Punjab, West Bengal, Bihar and Orissa, rape and mustard seed in United Provinces, Bihar, West Bengal, Assam and East Punjab and groundnut in Madras, Bombay, Hyderabad, Central Provinces and Berar.

That oilseeds are important items in India's export trade is borne out by the following table:

(*In rupees*)

		1945-46	1946-47	1947-48
Castor	...	16,67,211	26,43,224	27,72,838
Groundnut	...	6,07,31,553	..	3,73,73,211
Linseed	...	5,83,51,308	2,54,56,369	3,80,88,387
Rape	...	85,80,628	...	...
Sesamum	...	17,58,306	16,98,011	8,71,215

As vegetable oil is extremely useful in various ways in the western countries, it has been aptly pointed out that India has not been making the maximum use of her oil-seeds resources by developing oil-crushing industries on a large-scale. Research work has been undertaken by the Board of Industrial and Scientific Research to explore the possibilities of making use of vegetables oils in industrial uses in India.

Pakistan is very deficit in the production of oil-seeds. Pakistan produces negligible quantity of groundnut, linseed, castorseed and sesamum. There is some production of oilseeds in West Punjab and other areas cultivate negligible quantities. Although rape and mustard are grown to an appreciable extent, the total production does not exceed one-fifth of that of India.

Sugar : Cultivation of Sugar Cane :—India cultivated sugar-cane from early times, but her yield per acre is very low as compared to other countries. Although India has now a full-fledged sugar industry, it is comparatively of recent growth and formerly there was a large production of gur or jaggery which was extracted by boiling down the juice without removing molasses.

Gur is even now largely consumed within the country. At present sugar-cane is mostly crushed by iron crushers in place of the old wooden ones. The following table illustrates the acreage and yield of sugar-cane, raw sugar and gur.

	Indian Union	Pakistan
Acerage (in '000 acres)	2,692	438
Production of sugar-cane (in '000 tons) .	31,370	4,481
Gross production of raw sugar (in '000 tons)	3,155	417
Calculated net production of gur for direct consumption (in '000 tons)	1,865	266

India's cane yield per acre at about 14 tons compares unfavourably with 56 tons and 62 tons in Hawaii and Java, respectively. It has been pointed out that if the United Provinces and Bihar, the chief sugar-producing areas could even raise their cane production at least to the level of certain tracts in Bombay and Madras Presidencies, where the average yield has reached the all-India record of 60 tons per acre, there would be a sharp reduction in the cost of production. The Cane Cess levied by the United Provinces and Bihar Provincial Governments during the last twelve years fetched an enormous amount to the provincial exchequers, out of which considerable sums were spent for the supply of manures, improved saplings and crossings, which yielded better results. In spite of this, the progress achieved is far below the optimum. Notable cane-producing areas are the United Provinces, Bihar, East Punjab, West Bengal, Madras, Bombay, Assam and Orissa.

The Sugar Cane Act was passed in 1934 and this empowered the Provincial Governments to enforce a minumum price to be paid by factories to growers. Both the United Provinces and Bihar Governments have utilised their powers and enforced a minimum price of sugar-cane, which was raised from Re. 1/4 per maund to Rs. 2/- per maund in 1947-48.

The Tariff Board reported in 1931 that in order to improve the Indian sugar industry, it was necessary to attend to the agricultural and scientific aspects of the industry. Accordingly, they

recommended for an annual grant of Rs. 10 lakhs to the Imperial Council of Agricultural Research for research work on sugar-cane. Then the Tariff Board further recommended in 1938 that an allotment of 3 annas per cwt. should be made from the excise duty to be utilised for central research and assistance to provincial agricultural departments. The Imperial Cane-breeding station at Coimbatore and the Agricultural departments are doing useful researches, directed towards improving cane production. The Imperial Institute of Sugar Technology at Cawnpore is also working on same lines. Although the cane yield shows an improvement in both quality and quantity, there remains further scope for progress.

History of the Indian Sugar Industry :—It is gratifying to note that the Indian sugar industry registered a phenomenal growth following the grant of protection to the industry since 1931-32. The number of sugar factories manufacturing white sugar rose from 32 in 1932-33 to 145 in 1939-40. There were 135 factories working in India in 1947-48 employing over 120,000 workers. The total capital employed in the industry is estimated at about Rs. 35 crores.

India is at present fully self-sufficient in sugar. Originally, she used to import the bulk of her requirements. Imports of Austrian and German beet-sugar were replaced by those of Java and Mauritius by the imposition of countervailing import duties on bounty-fed German sugar in 1903. The Indian sugar industry suffered a decline from foreign competition and the cane acreage dwindled preceding the wars of 1914-18. There was however a recovery from 1918-19 owing to a rise in prices of sugar.

The refined sugar industry could not flourish in India until the grant of protection, because the Indian industry was handicapped by low cane yield per acre, lack of up-to-date machineries, low yield of molasses, lack of transport facilities and foreign competition. The development of the Indian sugar industry attracted the attention of the authorities from 1901-2. Coimbatore in Madras started a cane-breeding station. The Government of India appointed a Sugar Committee in 1919 to investigate the possibilities of a sugar industry in India. On the initiative of the Imperial Council of Agricultural Research, the question of granting protection to the Indian sugar industry was referred to the Tariff Board by the Government in 1930. Being satisfied that this

indigenous industry fulfilled the conditions for protection as laid down by the Indian Fiscal Commission, the Tariff Board proposed a protective duty of Rs. 7-4 per cwt. for the first seven years and a duty of Rs. 6-4 per cwt. for the next eight years. Immediately an increase of the duty of Rs. 1-4 per cwt. was made in 1931-32 as a temporary measure. Then the Sugar Industry Protection Act of 1932 was passed, which provided for a protective duty of Rs. 7-4 per cwt. to be effective up to 31st March, 1938 in the first instance. The Indian industry expanded rapidly since then.

The Tariff Board conducted a further enquiry into the Indian sugar industry in 1937 to examine the question of extending the protection up to 31st March, 1946. The Board was fully satisfied with the progress of the industry and recommended the continuation of the protective duty of Rs. 7-4 per cwt. exclusive of the excise duty for a further period of eight years. The Government however agreed to the continuation of the protective duty but at a reduced rate. Accordingly the Sugar Industry Protection Act of 1939 was passed in April, levying a protective import duty on sugar of Rs. 6-12 per cwt. exclusive of the revenue duty of Rs. 2, equivalent to the excise duty. An Act was passed in 1941, which extended the duty up to 31st March, 1942. Subsequently the period of protection was extended up to 31st March, 1946 and to a further period up to 31st March, 1948. The period of protection has now been extended by another two years on the recommendations of the Tariff Board.

The Sugar Syndicate was inaugurated in 1937 in order to eliminate competition amongst Indian sugar mills. The Syndicate has nearly all mills as members. The Governments of United Provinces and Bihar passed the Sugar Factory Control Acts, providing for a license from the Government to run a sugar mill. All mills in the United Provinces and Bihar must join the Sugar Syndicate, which undertakes to sell the sugar of their member mills. A sugar Commission was instituted in 1940 in order to exercise the required Governmental control over the industry through the Sugar Syndicate.

Until recently, the Government of India controlled production, distribution and price of sugar in India. This state control was initiated during the war and continued in full swing until 1948. The Government exercised its control through the Sugar Controller.

For some time up to early 1948, not only the price of sugar was controlled, it was also a rationed article. In the beginning of 1948, controls on sugar were lifted, but provincial control over sugar-cane persisted as before. It is now felt that the withdrawal of control has not been conducive to the interests of consumers, because prices of sugar rose phenomenally since decontrol. It is likely that the Government will again intervene and at least regulate the price of sugar until the shortage of the commodity disappears.

It has been pointed out that high prices of sugar in India are due among other factors to low cane yield per acre, costs of transport, old technique of production giving a small percentage of recovery at 10 per cent compared unfavourably with 11·9 per cent in Cuba. In order to hold its ground, it is essential that the Indian sugar industry should improve its productive efficiency to effect a reduction in costs. The Indian sugar industry should adopt rationalisation and improve recovery percentages through scientific methods. Attention should be paid to a more progressive development of the subsidiary industries like alcohol and spirit.

It may be pointed out that there is a large consumption of gur in the country and at present its production is estimated at about 3,630,000 tons. The technique of gur-making is old and continues to remain neglected. It may be considerably improved.

India's exports of sugar except to Pakistan are limited to Colombo, Straits Settlements, Fiji and Middle East. The export of refined sugar by sea was prohibited by the Government of India for five years under the International Sugar Convention of 1937. This ban was temporarily removed in 1940 to enable India to export 2 lakhs tons of sugar to the United Kingdom during the war, but Indian sugar was not sent there due to the low price offered by the British Government. The Government of India sent a considerable quantity of Indian sugar to the Middle and Near East in 1942 to meet war demands. Although India is now free to export sugar by sea because the International Sugar Agreement expired in August, 1942, she can hardly afford to go in for the foreign market owing to acute domestic shortage. Besides, high costs of Indian sugar are deterrents to exports and Pakistan which is a good market for Indian sugar is switching on

to other sources of supplies due to high prices of Indian sugar. The following figures illustrate India's exports.

	1945-46	1946-47	1947-48
Quantity (Tons) ...	7,075	1,824	5,243
Value (Rs.)	28,96,803	9,99,147	38,68,122

In order to meet the deficit in revenues, an excise duty was levied on Indian sugar in 1934 and it was raised from Rs. 1-5 to Rs. 3 from 1st April, 1942.

The Future of Indian Sugar Industry:—The per capita consumption of sugar in the sub-continent at the present time is very low and works out to only about 6 lbs. and in addition to 24 lbs. of gur, the total per capita consumption of sugar and gur is about 30 lbs. during the last few years. The per capita consumption of sugar in the United Kingdom is about 106 lbs., U.S.A. 97 lbs. and France 52 lbs. It is hoped that before long the sugar industry in india will be able to produce a much larger quantity of sugar than at present.

It may be observed here that the Government of India appointed a Sugar Panel to investigate the possibility of increasing the sugar output in India. The report of this panel was published in 1946. They recommended a target production of 16,00,000 tons of sugar to be reached at the end of 5 years, of which 15,50,000 tons were meant for internal consumption and 50,000 tons for export outside India. During 1947, the Government of India, after reviewing the recommendations of the panel, came to the conclusion that the above target should be increased to 18,50,000 tons of sugar per annum and for that purpose they decided to allot a further 25 new units of sugar factories among the various provinces. The Sugar Panel estimated that the total cost of machinery required for the fuller exploitation of the existing capacity of the sugar factories, enhancement of the capacity of the existing small plants and construction of 20 new factories of 1,000 tons of cane per day crushing capacity, would be about 11·12 crores of rupees. If we add to this the cost of establishment of 25 new factories decided by the Government of India, while reviewing the recommendations of the Sugar Panel in 1947, the total cost would be about 22 crores of rupees for the machinery.

The above target has since been revised downwards after the partition of the country.

The following tables are interesting:—

TABLE I

Year	No. of Cane Factories working in India.	Cane Factory Production.	Sugar refined from Gur.	Khandsari conjectural estimates.	Total Production of Sugar in India.
		Tons	Tons	Tons	Tons
1932-33	57	290,177	80,106	275,000	645,383
1938-39	139	650,800	14,700	100,000	762,500
1939-40	145	1,241,700	26,500	125,000	1,393,200
1940-41	148	1,095,400	44,700	200,000	1,340,100
1941-42	150	778,100	20,400	100,000	898,500
1942-43	150	1,070,700	7,800	214,000	1,292,500
1943-44	151	1,216,400	7,700	150,000	1,374,000
1944-45	140	953,500	6,400	125,000	1,084,900
1945-46	145	944,800	4,000	117,000	1,065,800
1946-47	141	928,200	4,000	110,000	1,142,200
1947-48	140	950,000	4,000	110,000	1,064,000
1948-49	140	1,000,000	4,000	110,000	1,104,000

TABLE II

Year	Total acreage under sugar-cane in thousand acres.	Acreage under improved varieties in thousand acres.	Average cane production per acre (in tons).	Gross production expressed as gur (in thousand tons).	Calculated production of sugar-cane (in thousand tons).
1932-33	3,425	1,845	14·9	4,859	51,129
1938-39	3,270	2,673	15·0	3,572	35,851
1939-40	3,788	2,893	15·0	4,849	47,732
1940-41	4,749	3,529	15·0	5,992	60,668
1941-42	3,671	2,831	15·0	4,549	46,491
1942-43	3,755	3,004	15·0	5,323	54,295
1943-44	4,389	3,545	13·8	6,063	61,782
1944-45	4,305	3,604	13·2	5,679	57,699
1945-46	3,825	2,589	14·0	5,416	...
1946-47	4,108	...	...	5,576	...

TABLE III

Year	Calculated net annual production of gur for direct consumption (in tons)	Year	Calculated net annual production of gur for direct consumption (in tons)
1932-33	3,240,000	1942-43	3,015,000
1938-39	2,131,000	1943-44	3,499,000
1939-40	2,441,000	1944-45	3,633,000
1940-41	3,414,000	1945-46	3,578,000
1941-42	2,829,000	1946-47	3,630,000

Pakistan :—The acreage under cane in the Indian Union is about 30,00,000 acres, which it is about 10,00,000 acres in Pakistan. There are 135 sugar factories working in India, compared to 10 in Pakistan. Normally it is estimated that the annual consumption of sugar in Pakistan is about 2,85,000 tons, out of which Pakistani mills are likely to produce about 35,000 tons. As Pakistan obtained about 12½ per cent of total gur production in undivided India, she is likely to have an annual deficit of about 100,000 tons of gur, assuming the per capita annual consumption around 20 lbs.

Tea :—India is one of the largest tea producers in the world. The initiative of growing tea in India came from the Government, which started producing tea from Chinese seeds in Assam from 1834. It was decided in 1852 that the indigenous tea produced in India was good for the London market. The tea industry began to make quick progress and the Government ceased to have anything with tea production since 1865 and the Indian tea industry has since been financed and managed by private capital, mainly European. The tea industry shows continued prosperity with gradual expansion in exports and internal consumption. Nearly every garden possesses factories for making tea ready for the market, because tea requires to be processed immediately after plucking. In order to avoid a depression in the tea industry, an international regulation for the exports of tea was adopted in May, 1933, which fixed export quotas to tea-exporting countries. This export control scheme was further extended for five years from April, 1938 and then for another two years after the cessation of hostilities. The Indian Tea Control Act was also passed in 1938 to enable the Government to regulate the production and marketing of tea. That the Indian tea industry occupies an important place in national economy is illustrated by the following statistics. The Indian Tea Association has been largely responsible

for popularising the consumption of tea in the country. The Association receives the proceeds of a small cess, imposed from 1903 on all Indian teas exported from India. The rate of this cess was increased from annas eight to annas twelve per 100 lb. in April, 1935. The Association conducts propaganda for popularising the consumption of tea beverages in India as well as abroad.

Figures of tea Production, Consumption and Exports are give below:—

AREA UNDER TEA CULTIVATION (In '000 acres)

	India	Pakistan
1938	761	73
1943	765	74

TEA PRODUCTION (In million lbs.)

	India	Pakistan
1947	445·9	43·3
1948	446·2	45·7

TEA EXPORTS

	1945-46	1946-47	1947-48
Quantity (lbs.) ...	363,928,642	327,364,979	383,984,639
Value (Rs.) ...	35,64,51,795	34,56,20,684	54,90,14,784

Tea is chiefly grown in Assam, West Bengal, Madras, Travancore and United Provinces.

The Indian tea industry enjoyed an unprecedented boom during the last war, owing to the absence of supplies from competitive countries like the Netherlands East Indies. Lately, it is found that foreign markets especially U.S.A. are showing contraction and complaints have been received about the deterioration in quality of Indian teas. It is necessary to pay special attention to maintaining quality and reducing costs of production. The Indian tea industry should seize this opportunity of consolidating its position in foreign markets.

Tea Committee :—The Government of India have decided to create a committee to be called the Tea Committee for India, as a substitute for the existing Indian Tea Market Expansion Board

founded in 1903. The creation of this Committee is considered necessary in view of the importance of the tea industry to India's national economy and also for the development of the industry under the control of the Central Government. The functions of the Committee will be mainly to promote research, collect statistics, carry on propaganda, improve marketing conditions and advise the tea growers and exporters in all matters necessary. The Committee will consist of representatives of the tea industry, the Central Government and the Governments of the various tea-growing provinces and States and will work under the control of the Central Government. The expenses of the Committee necessary for discharging its functions will be met from proceeds of the tea cess. In view of the enlarged function of the Committee it is proposed to raise the maximum rate of cess from Rs. 1-8 to Rs. 2 for 100 lb. of tea exported. The necessary bill in this connexion has been introduced.

The Government of India has also appointed an Ad Hoc Committee to investigate the possibility of the early establishment of Calcutta as the centre of the world's tea market by building suitable warehouses and training Indians in the tea trade.

Pakistan :—Tea is grown in Sylhet and Chittagong in Eastern Pakistan.

The consumption of tea in India averages about 140 million pounds a year, while it is estimated at about 20 million pounds in Pakistan, which is therefore likely to have an equivalent amount of exportable surplus.

In order to encourage the production of tea, the Pakistan Government has arranged to import substantial quantities of fertilisers for tea gardens and it is also investigating the possibilities of opening a tea market in Eastern Pakistan at an early date. The Government of Pakistan also proposes to set up a Pakistani Tea Committee on Indian lines to encourage the growth of the Pakistani tea industry.

Coffee :—The systematic cultivation of coffee began in India from 1830 and the industry enjoyed prosperity since that date. Lately, there has been continued decline in the production of coffee, following reduced exports, because cheaper Brazilian coffee ousted Indian coffee in foreign markets. It is grown largely in Mysore, Madras, Coorg, Cochin and Travancore and Orissa. The

United Kingdom and France constitute the principal export markets for Indian coffee. In order to assist the Indian coffee industry, the Indian Coffee Cess Act was passed in September, 1935, levying a cess of Re. 1 per cwt. of coffee produced in India. The fund constituted by the cess is administered by the Indian Coffee Cess Committee for propaganda and improvement of marketing. It also looks after agricultural and technological research. The acreage, yield and exports of coffee are illustrated by the tables given below:—

TABLE I

Year	Acreage	Production (in tons)
1940-41	181,013	14,226
1941-42	180,412	17,886
1942-43	194,474	16,257
1943-44	198,446	17,215
1944-45	198,147	17,345
1945-46	198,700	25,000

TABLE II

Exports	1945-46	1946-47	1947-48
Quantity (In cwts) ...	28,754	93,650	44,768
Value (in Rs.)	26,10,435	93,35,227	43,34,941

Indian Coffee Board :—In 1942 legislation was enacted whereby the entire coffee crop of India was to be handed to the Indian Coffee Board Pool. The Board was responsible for marketing the coffee thus received. The growers expressed much satisfaction with the working of this scheme which helped to maintain fair prices for all and provide a market for the whole of the produce. The scheme at first was only intended to be in force for a period of five years, but it has now been extended without a time-limit by the Coffee Market Expansion Act of 1947. The internal consumption is estimated at about 17,000 tons.

There is no coffee cultivation in Pakistan.

Cotton :—The following table illustrates the position of cotton in India and Pakistan:—

AREA AND YIELD OF COTTON

Area ('000 acres) and Yield ('000 bales of 400 lbs.)

	Indian Union	Pakistan
	Yield	Yield
1938-39	36,64	13,81
1942-43	28,70	18,32
1944-45	22,32	13,48
1945-46	21,23	12,95
	Area	Area
	17,796	3,568
	Area under Improved Varieties	Area under Improved Varieties
	5,390	3,015

The cotton production in undivided India showed a downward trend since 1940-41 and declined from 6·08 million bales in 1940-41 to about 3·44 million bales in 1945-46. It is estimated that the cotton production in the Indian Dominion dropped more sharply than in Pakistan, having registered a decrease from 3·7 million bales in 1938-39 to nearly 2·14 million bales in 1945-46, presumably due to the Government's Grow-More Food Campaign. The Indian Union claims a larger percentage of the production of improved varieties as compared to Pakistan. Out of the total of 10 million acres under improved varieties, Indian Union had about 7·3 million acre in 1942-43 and this position continues to remain almost unchanged. Indian Union however produces little of long staple cotton. In 1945-46 she produced about ⅜ths as much long staple cotton as Pakistan, her output standing at 23,000 bales against Pakistan's 58,000 bales.

India's mill consumption of raw cotton is estimated at about 4·5 million bales as most of the cotton mills are situated in the Indian Dominion.

Raw cotton used to be an important item of India's exports before the war, but now the position has substantially changed. India exports principally short-staple and medium staple cotton,

while she imports chiefly long-staple cotton of finer varieties from Egypt and America. Pakistan and India shared in these exports in the ratio of two to one. It is estimated that Indian mills consume about 4·5 million bales of cotton, while India grows nearly 3 million bales.

Formerly, Indian mills could not utilise short-staple cotton, which is largely grown in this country. It is gratifying to observe that owing to technological improvements, Indian mills have substantially increased their consumption of short-staple variety. The yield of cotton per acre in India varies between 75 lbs. and 100 lbs. of tent cotton and compares unfavourably with 180 lbs. in U.S.A. and 300 lbs. to 400 lbs. in Egypt. The Agricultural Department has been trying to improve both the acreage yield and quality of Indian cotton. It has also been attempting to introduce exotics, especially long staple cotton and the production of hybrids. Cambodia cotton was introduced in Madras in 1904 and American cotton has been grown in Bombay and United Provinces. The indigenous cotton growers were encouraged by the doubling of the import duty on raw cotton in March, 1939. Cotton is largely grown in Bombay, Central Provinces, East Punjab, Berar, Madras, United Provinces, Baroda and Hyderabad.

The establishment of the Lancashire Indian Cotton Committee in 1932 popularised the use of Indian cotton amongst British mills to a large extent. The Bombay-Lancashire Textile Agreement of 1933, popularly known as the Mody-Lees Pact, was aimed at expanding the use of Indian cotton in the United Kingdom. The Indo-British Trade Agreement of 1939 provided for the exchange of Lancashire piecegoods with Indian raw cotton.

The Government of India appointed the Indian Cotton Committee in 1917 to investigate the possibilities of growing long staple cotton in this country, devise methods for the prevention of adulteration, damping, mixing, packing, etc. and recommend improvements in ginning and marketing. The Committee reported in 1919 and recommended the introduction of open markets in the Berar Model to give an opportunity to buyers to examine the grade on the spot. It was also recommended that ginning and pressing factories should be licensed, restrictions placed on transport of cotton to prevent malpractices of adulteration, mixing and damping and co-operative societies allowed to grow. The Committee suggested the organisation of a Central

East India Cotton Trade Association for the improvement of the cotton trade. It also favoured the establishment of a Central Cotton Committee to bring about a closer liaison between the Agricultural Department and the cotton trade and this Committee consisting of 20 official and non-official members should be an advisory body to be consulted on all cotton legislation. It should look after the licensing system and carry out authoritative valuations of new varieties of cotton and spinning tests. The East India Cotton Trade Association was formed in 1932. The Central Cotton Committee started to function from 1921 and on its initiative, the Cotton Transport Act of 1923 was passed to prevent the adulteration of cotton and this Act originally intended for Bombay was later extended to cover also Madras. The Cotton Ginning and Pressing Factories Act was passed in 1925. A technological laboratory has been established by the Central Cotton Committee to carry out spinning tests and other allied researches. The Committee has also undertaken experiments on cotton cultivation in co-operation with the Institute of Plant Industry at Indore. The Committee derives its finances from a cess of two annas per bale of cotton used in Indian mills and exported from India. The provisions of the Cotton Markets Act passed in Bombay in 1927 were incorporated in 1939 in the Bombay Agricultural Produce Markets Act. Similar legislation has also been passed by the Governments of the Central Provinces and Madras.

The following statistics of Imports and Export of Cotton are given:—

IMPORTS OF RAW COTTON

	1945-46	1946-47	1947-48
Quantity (in Tons)	86,075	98,997	112,894
Value (in Rs.) ...	22,88,20,579	25,91,67,101	31,17,16,908

EXPORTS OF RAW COTTON

	1945-46	1946-47	1947-48
Quantity (in Tons)	135,660	162,130	209,222
Value (in Rs.) ...	13,93,93,103	22,56,31,085	34,73,92,480

Pakistan :—Pakistan is well placed in cotton production. It is estimated that her requirements of raw cotton come to about 200,000 bales, leaving an exportable surplus.

Cotton is chiefly grown in Sind and West Punjab in Pakistan.

The Pakistani Government proposes to establish a Cotton Technological Institute to encourage the growth of long staple cotton.

The Government also proposes to introduce a Cotton Control Bill to license ginning factories in order to prevent the mixing of varieties. The West Punjab Cotton (Control) Act of 1949 has been passed and it is aimed at preventing the mixing of cotton at all stages, the planning of production on a regional basis and supplying pure seeds.

Jute :—India and Pakistan enjoy a monopoly of jute cultivation throughout the world. Its cultivation is chiefly centred in West Bengal, Assam, Cooch Bihar, Bihar, Orissa and United Provinces, and in East Bengal in Pakistan. In order to help the recovery of prices of raw jute, the Government of Bengal inaugurated a campaign for the voluntary restriction of jute acreage from 1935. Then the Bengal Jute Regulation Act of 1940 was passed and this placed jute acreage restriction on a compulsory basis.

The following table is given to illustrate the area and yield of jute in India and Pakistan.

ACREAGE AND PRODUCTION OF RAW JUTE

	INDIAN UNION		PAKISTAN	
	Acreage ('000)	Production ('000 bales*)	Acreage ('000)	Production ('000 bales*)
1938-39	8,92	16,30	22,73	51,89
1940-41	14,17	28,48	42,52	103,38
1943-44	7,13	17,51	19,27	52,54
1946-47	5,37	15,20	13;74	41,28
1947-48	6,46	16,96	20,58	68,43

* Bale = 400 lbs.

The above figures do not include those of the U. P., which are: Area—7,000 acres; Production—about 15,000 bales.

It is clear that after partition, the major part of jute acreage has gone to Pakistan and efforts are now being made to step up jute production in India. Although the free extension of jute acreage is handicapped by the Grow-More-Food campaign, substantial progress has been made in the direction of increasing India's cultivation of jute. Already a large area has been placed under jute cultivation in Travancore and it is understood that an additional 205,000 acres will be shortly put under jute in Guntur, West Godavari and Cochin.

As all jute mills are situated in the Indian Dominion, India's deficit of raw jute is likely to be between 35 to 40 lakhs of bales per annum. Pakistan is likely to export its entire production and jute is now the main foreign exchange earner for Pakistan.

The following figures of exports of raw jute are given:—

	1945-46	1946-47	1947-48
Quantity (in Tons) ...	338,318	306,485	265,017
Value (in Rs.) ...	15,83,69,185	19,13,46,603	25,83,16,535

Indian Central Jute Committee:—A Central Jute Committee has been constituted by the Government of India. Representation is found in the Committee for trade and agricultural interests and for the Provincial Governments most concerned, namely, West Bengal, Bihar and Assam. The formation of the Committee is the result of a recommendation made by the Royal Commission on Agriculture. The functions of the Committee include agricultural, technological and economic research; the improvement of crop forecasting, production and testing and the distribution of improved seeds; enquiries and recommendations relating to banking and transport facilities and transport routes; improvement of marketing in the interests of the jute industry and collection and distribution of all relevant information on jute. The Committee will also advise the Local Governments concerned on any points within its prescribed functions which may be referred to it.

The Jute Agricultural Research Laboratories are situated at Dacca in Eastern Pakistan and are working on the improvement

of the plant, both in regard to quality and yield, the improvement in the methods of jute growing, the reduction of loss caused by diseases and insects and the improvements in the methods of retting. These aspects of research are being tackled in five sections *viz.*, Botany, Agronomy, Mycology, Entomology and Chemistry. In the field of genetics, considerable progress has been made. The mode of inheritance of branching habit, pigmentation patterns and other important characters have been worked out.

The work undertaken at the Technological Research Laboratories of the Committee at Tollygunj, Calcutta, includes the spinning of samples of fibre obtained in agricultural experiments and reporting on their quality as indicated by the results obtained. The spinning tests are carried out at a standard temperature and humidity and a special technique has been worked out to give good results with as little as 12 lbs. of fibre. Work of fundamental importance includes the investigation of the relations that may exist between spinning quality and measurable chemical or physical characters of the fibre. Considerable progress has been made in this direction. Problems dealt with, which are of direct interest to the mill, comprise the effect of twist on yarn strength, the improvement of jute bags for storing commodities such as sugar and cement in damp atmosphere and the spinning of flax and other fibres on jute machinery, either alone or blended with jute.

During 1938 and part of 1939, the Marketing Section carried out a comprehensive enquiry into the conditions governing the marketing and transport of jute in the principal jute growing districts of East and West Bengal, Assam, Bihar, Orissa and the United Provinces. The data, thus collected, were published in two reports entitled, "Report on the Marketing and Transport of Jute in India" (1940) and "Report on the Marketing of Jute and Jute Products" (1941). The former embodies the results of the enquiry relating to the marketing and transport of raw jute so far as inland business is concerned, while the latter embodies that relating to the jute export trade and manufacturing industry. For the last few years, the Section has been engaged in certain developmental work of which the main are: dissemination of jute prices in the mofussil, marketing of fibre grown from improved seed, organization of grading parties, establishment of

co-operative jute sale societies and study of Indian market with a view to increasing the consumption of jute and jute goods.

The Economic Research Section keeps constant vigilance over all aspects of the economics of jute. Some important findings relating to the world's consumption of jute, its trend in recent years and its relation to the changes in the world market have been published in the Committee's Economic Research Bulletin. Other investigations have thrown light on some important aspects of the jute industry, such as the productive capacity of the Indian Jute Mills, the possibility of extending the market for jute goods manufactured in India, etc. The effect of the growth of jute substitutes and of new uses of jute on the jute trade is also being investigated. Besides research work on the economics of jute, a large volume of information of various subjects pertaining to jute is regularly collected from authoritative sources in different parts of the world. The Committee has also a special correspondent in the Argentine Republic to report on the conditions of the jute trade in that country. A close watch is maintained on all developments in economic and commercial policy abroad calculated to replace jute by its possible substitutes, and prompt steps are taken to collect all relevant information on the subject to place it at the disposal of the trade and others concerned.

A monthly journal, known as the Indian Central Jute Committee Bulletin is published, containing figures of production, consumption, prices, stocks, imports and exports of jute and jute manufactures, and also information regarding the prices and utilisation of jute substitutes. It also includes items relating to export and import restrictions imposed on various countries and other information regarding the economics of jute and its competitors, as well as general information of interest to the trade. The Committee also disseminates information to the grower to assist him towards improved methods of growing and retting, and getting better prices for his crop. A preliminary investigation into the economics of jute growing has been undertaken in three representative villages of Bengal.

Tobacco:—It is said that the tobacco crop was introduced in India during the early seventeenth century by the Portuguese. The Government have tried to improve the local method of curing and manufacturing to produce a better quality leaf since

the days of the East India Company. The following table illustrates the area and yield of tobacco in India and Pakistan:—

AREA AND YIELD OF RAW TOBACCO

	Area (in '000 acres)		Yield (in '000 tons)	
	Indian Union	Pakistan	Indian Union	Pakistan
1938-39	938 (58 Hyderabad)	352	337	151
1941-42	988	343	353	138
1943-44	716	303	258	118
1945-46	1,026	194	335	88

It is clear that India imports a large quantity of manufactured tobacco, presumably due to the poor quality of the indigenous product. The cigarette manufacturing factories show a continued expansion in India following a rise in demand. Although the Indian leaf tobacco makes a good filler, it is usually unsuited to wrappers and this was met up to 1941 by the importation of Sumatra and Java leaf. It is gratifying to observe that the Agricultural Research Institute has been paying attention to improving the quality of Indian tobaccos, especially by hybridization of new kinds. It is also trying to grow in India tobaccos, similar to virgina quality in colour, flavour and texture. It may be mentioned that high import duties on tobacco help substantially indigenous product.

The statistics of exports and imports of manufactured tobacco are reproduced below:—

	1945-46	1946-47	1947-48
Exports—			
Quantity (in lbs.) ...	21,902,575	72,151,387	49,944,694
Value (in Rs.) ...	1,86,85,050	5,92,94,424	5,02,68,284
Imports—			
Quantity (in lbs.) ...	14,871,788	10,116,758	12,789,353
Value (in Rs.) ...	3,61,12,382	2,77,35,231	3,66,37,176

Lac :—The production of stick lac in the Indian Union is illustrated by the following figures:—

	(In '000 Tons)		(In '000 Tons)
1938-39 ...	... 53·7	1944-45 ...	... 35·6
1939-40 ...	... 51·6	1945-46 ...	... 41·7
1940-41 ...	... 45·5		

The following table gives the statistics of exports:—

	1945-46	1946-47	1947-48
Quantity (in cwts.) ...	434,174	676,808	542,134
Value (in Rs.) ...	4,33,22,025	11,18,23,825	9,11,31,043

It may be observed that United Kingdom and U.S.A. are the chief importers of Indian lac.

The pre-war consumption of stick lac in India was estimated at about 4,000 tons or about 2·3 thousand tons of shellac.

Lac is chiefly utilised in varnishes, paints, polishes, gramophone records, bangles, wood turning industry, jewellery, colouring skins and other miscellaneous items. There is no lac production in Pakistan.

Indigo :—The Portuguese started the indigo industry in western India in the early days and about the year 1778 the East India Company revived it in Bengal. Then the industry was shifted to Tirhoot and United Provinces. India used to occupy the foremost place among indigo-producing countries of the world and later yielded place to West Indies. India continued to have a prosperous indigo industry until it was severely hit by the development of the synthetic indigo industry in Germany. The area under indigo dropped from 1,688,901 acres in 1896-97 to about 170,600 acres in 1913-14. The total reported area was estimated at only about 60,000 acres in 1940-41 and the value of exports dropped to about Rs. 17,000 in 1939-40. It is grown chiefly in Madras, United Provinces, Bihar, East Punjab and West Bengal. The dye is systematically extracted and marked in only Bihar factories. It may be recalled that in 1915 the Delhi Conference considered the question of reviving this indigenous industry. An indigo cess was levied upon exports of indigo in 1918 and the

proceeds were devoted towards improving the cultivation and the manufacture of indigo in this country. India exported 518 cwts. of indigo valued at Rs. 75,950 during 1947-48.

Opium :—The cultivation of opium in India shows a progressive decrease and the area under it declined from 614,879 acres in 1906-7 to about 7,138 acres in 1939-40. This followed the prohibition of exports to China under the agreement entered into between the Governments of India and China in 1907 and then in 1935 the Government of India banned all exports of opium on private account. It is chiefly grown in United Provinces and East Punjab. There is some cultivation of opium in West Punjab in Pakistan.

Rubber :—The production of raw rubber continues to show an upward tendency in India. It is grown largely in Travancore, Madras, Cochin, Coorg and Mysore. In order to prevent a depression in the rubber industry, an international scheme for the regulation of production and exports of rubber has been functioning since 1934. The following table illustrates India's statistical position in regard to rubber.

The total planted area in India is about 158,322·15 acres, and is distributed as follows:—

TABLE I

	Acres
Travancore State	113,731·60
Mysore State	639·30
Cochin State	14,154·22
British India	29,797·02
Total ...	158,322·15

TABLE II

	Production in tons	Acreage bearing	Average yield per acre per year in lbs.
1940	16,671	123,820	302
1941	16,295	124,135	294
1942	16,597	123,476	301
1943	16,62[illegible]	121,647	306
1944	17,174	122,191	315
1945	16,077	122,444	294

The yield per acre in India is disappointing and compares unfavourably with the average yield in Ceylon, Malay or the Netherlands East Indies. The average yield per year per acre in Indian sub-continent varies from 294 to 315 lbs., compared to about 350 lbs. in Ceylon, while it is still higher in Malay and the East Indies, being as much as twice the Indian yield. The Indian grower ascribes the difference in yield chiefly to difference in soil, climate and the distribution in rainfall, resulting in high production cost. The low yield is, however, chiefly due to out-of-date methods adopted in growing rubber even after making due allowances for climatic conditions.

The total amount invested by the rubber-producing industry in the Indian sub-continent is about 12 crores, the total number of men being employed 50,000.

Till about the middle of 1934 there was practically very little consumption of indigenous rubber in the Indian sub-continent. Even as late as 1939, out of a total of 16,500 tons produced, only about 5,600 tons were used for internal consumption. About two-thirds of the rubber produced was thus available for export. The internal consumption rose to 5,600 tons in 1939 and reached the figure of 14,297 tons in 1941. During the war, the demand for rubber increased partly because of the greater requirement of the Allies and partly because supplies from the chief rubber-producing countries like Malay, Java, Burma were not available.

The internal market for rubber is growing with an expanding indigenous rubber manufacturing industry, which consumes more rubber than the growers can produce. Although the market for raw rubber shows expansion, danger threatens the growers from two directions. There is competition from imported rubber, and secondly there is competition from synthetic rubber. The threat of foreign competition is all the greater, because it is believed that world supply is actually in excess of world demand. The world price of rubber is at present about Rs. 50 for 100 lbs. and the Indian grower cannot afford to sell at that price as the cost of production in the Indian sub-continent is much higher.

In order to look after the proper development of the Indian rubber industry, a body under Central Control, called the Indian Rubber Board was constituted with headquarters at Kottayam by an Act of the Central legislature in 1947. The objects of the

Board were to develop the rubber industry, to see to the marketing of rubber and to regularise import and export. There is also a growing feeling that the producer of rubber can do a great deal to increase his efficiency and competitive power. The yield and quality can be improved by the adoption of better and more scientific methods. There could be less carelessness in the collection of raw rubber and in grading and baling. The entire marketing organisation should be improved.

The statistics of imports and exports of rubber are reproduced below:—

	1945-46	1946-47	1947-48
Imports: Raw Rubber:—			
Quantity (in lbs.) ...	137,663	379,421	3,848,112
Value (in Rs.) ...	40,569	2,69,470	20,49,063
Rubber Manufactures:—			
Value (in Rs.) ...	8,72,432	25,86,538	45,00,417
Exports: Raw Rubber:—			
Quantity (in lbs.) ...	5,065.536	669,836	...
Value (in Rs.) ...	37,58,700	5,02,537	...
Rubber Manufactures:—			
Value (in Rs.) ...	49,92,909	2,75,26,032	2,21,89,619

Pakistan produces no rubber.

Fodder Crops :—Although the cultivation of fodder crops has been increasing, its total quantum is insignificant in view of the huge size of India's agriculture. Recently the Department of Agriculture has been concentrating its attention on expanding the area of fodder crops and making suitable arrangements for storage. The Department has succeeded in introducing Egyptian clover as a soil renovator especially in Bihar and Central Provinces. The cultivation of bersum at Pusa is also a noteworthy event. The fodder crop is chiefly grown in United Provinces, East Punjab and Bombay. The acreage under fodder crops rose from 2·94 million acres in 1901-2 to 10·47 million acres in 1940-41. The chief growing areas in Pakistan are West Punjab and East Bengal. Fodder imports were valued at Rs. 67,591 in 1947-48.

The following table gives a consolidated picture of crop area and field:—

SUMMARY OF THE CROP FORECASTS FOR 1947-48, FOR INDIAN UNION (INCLUDING HYDERABAD)

(Figures in Thousands)

Crops	Forecast (1947-48)	AREA (acres)			PRODUCTION (tons)		
		Curr 94' 48.	rre ast of previou 'ear 946-47.		Current forecast 1947-48.	Corresponding Forecast of previous year 1946-47.	Percentage Increase (+) or decrease (−)
Rice ..	Final . ..	59,656	60,987	−2·2	18,760	19,856	−6
Wheat ..	Final	20,207	24,350	−17	5,346	4,745	+12·7
Jowar ..	First	22,268	23,093	−3·6	...	...	...
Bajra ..	Final	19,626	21,442	−8·5	2,525	2,667	−5·3
Maize ..	Final	7,755	7,888	−1·7	2,111	2,035	+3·7
Ragi ..	Final	5,108	5,174	−1·3	1,391	1,476	−6
Barley ..	Final	7,127	7,082	+0·6	2,488	2,414	+3·1
Gram ..	Second	17,627	17,052	+3·4	4,215	3,581	+17·7
Sugar-cane	Final	3,784	3,528	+7	5,269	4,913	+7
Sesamum	Supplementary	3,704	3,727	−0·6	333	323	+3·1
Groundnut	Final	9,974	10,267	−3	3,454*	3,588*	−4
Rape and Mustard	Final	4,38	4,321	+2	782	792	−1
Linseed	Final	3,338	3,259	+2	364	328	+11
Castorseed	Final	1,462	1,345	+9	128	117	+9
Cotton .	Fourth	10,833	11,434‡	−5	2,051†	2,131†‡	−4

* Relating to nuts in shell.
† In bales of 400 lbs. each.
‡ Revised.

CHAPTER IX

LAND, LAND TENURES AND IRRIGATION

Land

Subdivision and fragmentation :—It has been reasonably argued that the evils of subdivision and fragmentation of agricultural holdings rank among major factors for the backwardness of Indian agriculture.

Subdivision refers to the division of an agricultural holding, following succession and fragmentation means that an individual's holding consists of separate pieces of land scattered over a wide area instead of being in one compact block.

Although subdivision and fragmentation are not evils by themselves, they become positively harmful from the economic point of view if they are carried beyond a certain point. On the contrary, it has been pointed out that subdivision up to a point, tends to stabilise economic and social conditions by a widespread distribution of property in land and creating thereby a large class of peasant proprietors fondly attached to the soil. In India however both subdivision and fragmentation have been carried too far and in consequence deterring progressive agriculture.

The evils of subdivision and fragmentation depend essentially on the concept of an economic holding, which is rather difficult to define in exact and accurate terms. Keatinge understood by an economic holding in India to mean a holding which allows a man a chance of producing sufficient to support himself and his family in reasonable comfort after paying his necessary expenses and he estimated that in the Deccan an ideal holding would consist of forty to fifty acres of land in one block with a good irrigation well and a house situated on the holding. The size of an economic holding is likely to be determined by a multiplicity of factors e.g., fertility and configuration of soil, character of labour and resources of a cultivator, transport facilities, etc. It is therefore safe to define an economic holding in an optimum sense. It should mean a holding, which is capable of yielding optimum returns on land, labour and capital and it is unanimously agreed

that in India an agricultural holding on the average falls far below this optimum and as such is uneconomic and wasteful. It has been estimated that in Bihar and Orissa a tenant's holding averages less than half an acre with the average per cultivator unit at 3·1 acres, in West Bengal 3·1 acres, in Assam 3 acres and in United Provinces 2·5 acres. The size of an average holding is less than 2 to 3 acres in Bombay and Madras.

Among others, a very small-sized holding leads to uneconomic cultivation. It may not be possible to turn the bullocks round while ploughing. The fixed charge e.g., maintaining bullocks, carts, family, etc. remaining constant, the cost per acre tends to be high as the unit of holding becomes smaller. The cost of fencing becomes prohibitive and fencing is therefore rarely done with the consequence that a uniform system of cultivation is enforced on all cultivators. It is not feasible to introduce any new system of cultivation or rotation of crops, lest stray cattle damage the crop from neighbouring areas in the absence of fencing. A great waste of land is involved in making more paths, hedges, etc. to demarcate holdings. Owing to the smallness of the plot, it is not worthwhile for any single cultivator to dig wells or make any suitable irrigation arrangement because it is uneconomic. The small holder can ill-afford to go in for labour-saving devices like tractors, winnowers, threshers, etc. These evils of subdivision are aggravated when the small holding is further fragmented. Fragmentation renders costs of production high. It involves a great waste of energy and time in running from one plot to another. As different owners' plots lie overlapping, fragmentation encourages litigation. No single cultivator thinks it worthwhile to dig a well or devise any irrigation arrangements as he finds it impossible to carry water to all his plots through other man's holdings. As the cultivator perforce lives away from his plots, manures are lost in cowdungs, which are usually piled up at the residence of the cultivator.

Although the Hindu and Muslim laws of inheritance and succession are primarily responsible for the evils of excessive subdivision and fragmentation, there are other factors which have helped the growth of these evils in an indirect way. People have now been obliged to exercise their legal rights of sharing equally in ancestral property owing to adverse economic conditions. A rise in population, unaccompanied by any industrial expansion

has increased the pressure on land. The situation was worsened by the ruin of handicrafts and cottage industries. Once the people shifted back to land to earn livelihood, they were keen on acquiring their full rights in landed properties. The growth of modern individualism cutting at the root of joint cultivation associated with joint family system accentuated the evils of subdivision and fragmentation of agricultural holdings in this country.

Remedies against Subdivision and Fragmentation :— Experiments in consolidation of holdings on co-operative line have been attempted in different parts of India. On the initiative of Mr. H. Calvert, experiments in consolidation of holdings on co-operative basis through propaganda and persuasion were tried in Punjab from 1920-21 and it is estimated that about 13 lakhs of acres were redistributed by 1941. The Co-operative Consolidation of Holdings Societies numbered 1,477 by the middle of 1939 and the movement towards consolidation was accelerated by the passing of the Consolidation of Holdings Act of 1936, which applied compulsory consolidation to reclacitrant cultivators. The total area consolidated under the auspices of the co-operative movement aggregated 77,762 pucca bighas by 1939-40. The process of consolidation under a co-operative basis has been supplemented by the passing of the Consolidation of Holdings Act of 1939. Madras claimed about 22 co-operative societies for the consolidation of holdings by 1939-40. Although the Baroda State passed a permissive legislation in this regard in 1920, no practical result was really achieved. There grew up in the State about 79 co-operative societies for the purpose by 1938-39. The fragmentation was also checkmated in the State by the enactment of the Prevention of Fragmentation of Agricultural Holdings Act of 1933. In addition to consolidation effected by the co-operative societies, the Central Provinces Government applied compulsory consolidation under the Consolidation of Holdings Act of 1928.

It may be pointed out here that the above measures aimed at checking fragmentation and not subdivision. In the canal colonies of Punjab, the subdivision was checked by restrictions on alienations, and in the case of certain grants, by the limitation of succession to one heir.

Remedies applied so far have only touched the fringe of the problem. The creation of optimum economic holdings in Indian

agriculture is fundamentally important and brooks no delay. As persuation and propaganda on a voluntary basis are likely to achieve limited success, legislation should be adopted in this direction. The system advocated by Tarlok Singh in his book on Poverty and Social Change, should be seriously considered in this regard. He favours the institution of a system in which an entire village land would be put under joint cultivation and management, keeping unimpaired the existing rights in land. The village will function as a major base in a modernised industrial structure and ensure integration between rural and industrial economy. The system is likely to absorb the surplus rural population in industrial occupations, because a simultaneous expansion of industries is one of the essential adjuncts of Mr. Singh's scheme. The reorganisation of our agricultural economy on a joint cultivation system is likely to help the introduction of modern mechanisation, scientific selection of seeds, improved marketing, grading, sampling and packing etc.

The above considerations are applicable to Pakistan.

Land Tenures

Although the system of land tenures in India varies widely from large estates with several tenants to small holdings, there are broadly three kinds of land tenures found in India. There are various forms of landlord tenure in which one person or a few joint owners are made liable in one sum for land revenue on the entire estate as in East and West Bengal. This is popularly known as Zemindari system. Secondly, there are village communities, whose members are jointly and severally liable for the land revenue. Here we have as if a collective landlord. It is actually the joint village or mahalwari system. Then we have lands which are held and owned in single individual holdings, the individual holders being severally responsible for the payment of the revenue. This is known as the ryotwari system.

Village Constitution :—Broadly speaking, Indian villages are sub-divided into (*a*) Ryotwari village and (*b*) Lanlord village. Under the former, land is owned and cultivated by separate individual owners and every single owner is individually liable for the payment of land revenue on his holding. The common waste land belongs to the Government. It is widely found in Madras,

Bombay, Central India and Berar. In the landlord village, village is treated as a single unit and is owned by a single landlord or by a group of families. Land may be cultivated by hired tenants or by the co-sharers themselves. The waste land is the property of the village community. The entire estate is assessed to one sum of land revenue for which the whole body of co-sharers are jointly and severally liable. An individual co-sharer may with the previous permission of the Government separate his holding from the rest and thus become liable for land revenue only on his holding. This system is largely prevalent in East and West Punjab and among Jat, Guzar, and other tribes.

Some landlord estates may be big and include more than one village. These landlord estates owned by zemindars prevail in West and East Bengal. Oudh and Agra, where we have got what is popularly known as the Talukdar system. Though Malguzars, that is estates of the special class of landlords in the Central Provinces, are large in numbers, they are not the same as Bengal Zemindars. Bombay possesses a variety of landlord estates including jagirdars and inamdars, Gujrat talukdars, and Khots. There are Bengal types of Zemindars in Madras.

Tenant and Sub-Proprietary Rights :—Just as to the right of first calling has been super-added the rights by conquest, grant or superiority, proprietary rights may degenerate into sub-proprietary or tenant rights. Both in the landlord and ryotwari estates, a large number of grades of landed rights grew up in between the original proprietor and the lowest tenant.

In a sub-proprietary tenure, the holder is the owner of his holding but has no further rights in the whole estate. Such tenure-holders in West and East Bengal were granted a privileged position of permanent, heritable and transferable tenure held at fixed payment and the Act of 1885 recognised all as tenure-holders who were below the Zemindar but owned one hundred bighas of land. Similar rights are enjoyed by Pattidars who were given permanent lease of a tract by the Zemindar, who wanted to share his revenue responsibility with others. The Pattidars again created tenants known as dirpattidars with similar rights to share revenue responsibilities. Another class of sub-proprietary rights has grown with those who have created for themselves landlord estates over an earlier group, but now maintain their position by paying only

Government revenue without anything to the superior landlord. The principle of fixing revenue responsibility on one landlord in Central Provinces through the creation of Mulguzars necessitated the recognition of sub-proprietary rights. In Oudh sub-proprietary rights have been recognised by a separate sub-settlement fixing their rent payment to the Talukdar with whom main settlement is done by the Government.

There are different grades of tenant rights in India. A distinction has been made between natural and artificial tenants. Natural tenants could prove their title by facts, while no definite proof could be produced in case of artificial tenants. The Tenancy Act of 1859 was passed by Bengal and Agra providing for occupany rights to tenants who cultivated the same piece of land continuously for twelve years. The Act was amended in 1885 in Bengal and it provided for continuous cultivation for twelve years not of the same piece of land but of any land within the village. The Tenancy Act of 1928 declared holdings to be transferable subject to a transfer fee, but the landlord was given the right of pre-emption. It also strengthened the status of under-ryots and divided them into three classes.

Another Act was passed in Oudh in 1901 protecting the rights of tenants. It was revised in 1926 conferring life tenures on non-occupancy tenants in return for large extension of the *sir* (home farm) rights of landlords. The heirs of statutory tenants were allowed to continue for five years. The Tenancy Act of 1939 in United Provinces tends to restrict the *sir* land in the interests of tenants. Occupancy rights in Oudh originally limited to tenants who having once enjoyed proprietary rights had lost them were extended to ex-proprietors who lost their rights by sale or execution.

Occupancy tenants are defined in Punjab by the Act of 1887 as those who for two generations paid no rent nor services to the proprietor, but paid only their share of Government revenue.

In Madras every ryot in the Zemindary estate possessing land at the time of passing of the Estates Land Act of 1908 and every ryot admitted by the landlord to the ryoti land gets a permanent right of occupancy.

In Central Provinces, the twelve-year rule was first adopted. Later any one could buy an occupancy right by paying 2½ times

the annual rental. Subsequently this rule was superseded by a Rule in 1920, which created two kinds of occupancy tenants, possessing transferable rights.

The Act of 1880 protected the residential tenants in Bombay. Other tenures e.g., the talukdari tenure are dealt in by the Special Act of 1862.

Occupancy tenants as dealt with above predominate in landlord areas. There are other tenants also either superior or inferior in status to the occupancy tenants. Thus for example, we have in West and East Bengal superior tenants known as tenure-holders and ryots at fixed rates and the latter can neither be ejected nor their rents enhanced. There are tenants at fixed rates in the permanently settled areas of Benares in United Provinces. We have absolute occupancy tenants in Central Provinces and they can be ejected on no ground. They pay fixed rents, which are usually settled for the whole term of a settlement by the Settlement Officers. There are inferior tenants in several parts of the country and are popularly known as tenants-at-will.

Occupancy tenants enjoy several privileges. Their rents can only be increased within limits and after a certain period. An increase in rent can occur by agreement or by a court decree. In Central Provinces, rents are fixed by Settlement Officers for a ten-year period. Rent cannot be increased by more than 12½ per cent at one time in Madras. They are protected against ejectment except under special circumstances. Occupancy rights are hereditary and can be alienated on certain conditions. Within certain limits, the occupancy tenants can improve land without chances of enhancement of rent. There are certain laws of distraint for rent, protecting cattle, tools, etc. Occupancy tenants are entitled to relief in rent in case the landlords enjoy any remission of revenue from the Government in bad years.

Tenancy Legislation :—In almost all Zemindari provinces, tenancy legislation has been passed protecting the interests of tenants, while in the ryotwari areas the need for such legislation was not until recently felt, because the subordinate rights in between the cultivator and the state were few. The Bengal Tenancy Act of 1938 provides for the abolition of illegal exactions and cess imposed upon tenants, the right of pre-emption of the landlord and the salami paid to landlords, who can no longer

realise rent by certificate procedure. The under-ryot has been awarded equal rights with occupancy tenants and the rate of interest on arrears of rent has been stepped down to 6¼ per cent. No rent can be increased for 10 years. The Central Provinces Tenancy Act of 1939 conferred rights of transfer on occupancy tenants. The Bihar Tenancy Act of 1938 provides for reduction of rent to 6¼ per cent. No enhancement of rent is possible within 15 years. Hereditary rights were conferred on occupancy tenants and eviction was strictly restricted. The United Provinces Tenancy Act of 1939 provides for hereditary rights to nearly all occupancy tenants and extension of this privilege to tenants on *sir* land. The Act restricts the grant of *sir* rights to landlords. The rate of interest on arrears of rent was reduced to 6¼ per cent. It restricted ejectment and provided for a revision of rent downwards within a period of 5 years and once fixed, rents are to remain unchanged ordinarily for a period of 20 years.

The Bombay Tenancy Act of 1939 conferred certain benefits on all tenants and safeguarded their interests. It gave them fixity of tenure and prevented rack-renting. It provided for penalty on landlords if they exacted anything from tenants other than rent. The Government undertook to fix the maximum rent for certain areas. Any relief given to landlords by the Government in revenue is to be shared by the tenants as well. Tenants were assured of compensation in cases of eviction, which was strictly limited. No agricultural lease could be made for less than 10 years. The Act also created a new class of "protected tenants" with special rights of occupancy and protection against unfair rent and eviction.

Land Revenue Settlement :—Settlement means the determination of the share payable as rent to the state, the persons liable to pay the same and a record of all rights in land. It therefore implies a cadastral record, assessment of the revenue and means of collection. The cadastral records is prepared by a field-to-field survey. A village map is prepared, showing every individual holding, distinguishing between varying kinds of land for purposes of assessment. Along with this field survey, a record is prepared showing rights of land tenure and the various rights in land. These records are kept up-to-date by registering all changes and all rights thus recorded are presumed to be legally

correct. Land revenue is assessed by determining the value of lands and the sum payable by each holding is registered. Adjustments may be made to distribute the payment of the total revenues among co-sharers. Land revenue is usually collected in instalments to suit the convenience of those who pay.

The settlement is known as permanent in West and East Bengal, where the share of rent payable to the state is fixed in perpetuity. It is temporary if the state's share is fixed for a period only. It is a thirty-year settlement in Bombay, Madras and United Provinces, 20 years in Central Provinces and 40 years in East and West Punjab.

Settlement has been classified according to land terms into three main categories: Settlement for single estates under one landlord. Here we have (1) Permanent Settlement with Zemindars in West and East Bengal, north Madras and Benares, (2) Temporary Settlement with the remaining Zemindars in West and East Bengal and (3) Temporary Settlement with Talukdars of Oudh. There are settlements for estates of proprietary bodies like village communities and these are known as Mahalwari Settlements, which may be (1) The Mahalwari Settlement in United Provinces of Agra and Oudh, (2) The Mahalwari Settlement in West and East Punjab and (3) The Mulguzari Settlement of Central Provinces. Then we have Settlements of Individual Occupancies of Holdings, which consist of (1) The Ryotwari Settlement of Madras, (2) The Ryotwari System of Bombay and Berar and (3) Special System of Assam and Coorg.

Permanent Settlement in West and East Bengal :—Lord Cornwallis introduced the Permanent Settlement in Bengal in 1793 in co-operation with Sir John Shore, who favoured a ten-year settlement. Under the system the existing Zemindars or farmers of revenue were recognised as the sole proprietors of the land over which their revenue collection extended and their revenues payable to the state were fixed in perpetuity. This right of the Zemindars was subjected to punctual payment of the fixed land revenue and the estate was liable to sale on non-payment of the revenue. The Government reserved their rights to legislate in favour of protecting tenants. The assessment was fixed approximately at ten-elevenths of what the Zemindars received from tenants, the remaining one-eleventh was given to Zemindars for their services.

The Permanent Settlement was made with the sole object of ensuring a punctual receipt of land revenue, which was in a state of confusion at that time. It was also devised in order to encourage the improvement of agriculture.

The Permanent Settlement has now both critics as well as admirers. It is true that the settlement was made in a rough-and-ready fashion without preliminaries of maps, land records and surveys of land tenures. No classification of soils was either made. The settlement was made without any protection for the ryots who were rack-rented and deprived of legitimate rights. The Zemindars were given wide powers of distraint under Regulation VII of 1799. The anticipations of the framers of the Permanent Settlement were belied by later facts. Instead of taking active interest in improving their lands, the Zemindars mostly turned into absentee landlords and tenants were left at the mercy of the employers of the Zemindars.

In assessing the results of the Permanent Settlement, the admirers claim that it ensured to the state a fixed revenue. It guaranteed the loyalty of the landlords to the state. The Zemindars improved the condition of the peasantry by developing education and sanitation works. The system has created a prosperous peasantry in Bengal. The system is free from all expenses and vexations usually associated with temporary settlements.

On the other hand the critics point out that in spite of its usefulness, the system has outgrown its utility and should be dispensed with. It is now full of abuses and has become a potent instrument of exploiting the cultivators. By fixing revenue in perpetuity without compiling land records, maps, surveys and data regarding productivity of land, the Permanent Settlement deprived the state of its legitimate share in the produce of the land. The state was prevented from sharing in the benefits of rises in land values, following an increase of population, development of communication, etc. The Land Revenue Commission of Bengal (1938-40) estimated the annual loss in this generation accruing from the Permanent Settlement between Rs. 8 crores to Rs. 12 crores. In addition, the system did not take any account of the incomes from minerals and river fisheries and this entailed considerable loss of state revenue. The Zemindars ceased to take active interest in improving agriculture and turned out to be parasites, leaving

the collection of revenues in the hands of middlemen. The system in consequence led to sub-infeudation and fragmentation of proprietary interests in land. Ordinary peasants received no assistance from superior rights. The prosperity of Bengal's agriculture has been due among others to fertility of soil, climate, monopoly of jute, etc. The Permanent Settlement might have helped Bengal's prosperity initially, but it was definitely a handicap during the later stages of development. Despite theoretical arguments against modern temporary settlements, they have been found beneficial in the interests of national economy. They have been systematised and adequate provisions have been discretely devised to safeguard the ligitimate interests of tenants. The Congress is already committed to the abolition of the Zemindari systems and several provinces e.g. Bihar, Madras and United Provinces have started implementing the Congress pledge in practice.

Bengal Land Revenue Commission (1938-40) :—The Government of Bengal appointed a Commission in November, 1938, under the Chairmanship of Sir Francis Floud to examine the land revenue system of Bengal and recommend improvements. The Commission reported in March, 1940.

The majority of the Commission concluded that the Permanent Settlement had outlived its usefulness. They recommended that the state should be the sole landlord and come into direct contact with cultivators by acquiring the rights of all classes of rent receivers. The Permanent and the Zemindari systems should be replaced by a Ryotwari system. In acquiring all classes of rights of rent-receivers, compensation should be paid at a flat-rate of ten times the net profit of the proprietors and tenure-holders in cash if possible, or in bonds redeemable after 60 years. Mines and fishery rights should also be acquired. Pending acquisition, the Commission recommended the imposition of an agricultural income tax to be used solely for the benefit of agriculture.

The minority, six of whom signed minutes of dissent, held that state acquisition is likely to be a financially hazardous measure. It will disturb the existing economic set-up of Bengal. Tenants are now fully protected by tenancy laws and Bengal's agriculture is deficient not due to the Permanent Settlement, but owing to evils of sub-division and fragmentation of holdings, in-

creased pressure of population on land, absence of subsidiary occupations of the rural population, etc.

Although the abolition of the Zemindari system has been accepted as the ultimate aim of the provincial Governments both in India and Pakistan they have rightly deferred the reforms due to financial stringencies. The Agricultural Income-tax has already been imposed in several provinces as a transitional measure.

It may be recalled that the Permanent settlement was also extended to Benares and some parts of Madras.

In Bengal, temporary settlements were made in places where Permanent Settlement was not effected by making settlement with middlemen, having taken the percentage of assets as high as 70 per cent. These settlements were similar to those prevailing in Agra.

Mahalwari Settlements :—All Mahalwari settlements which are temporary are made with landlords or village communities under Regulation 7 of 1882 as amended by subsequent legislation.

The basis of assessment in Mahalwari settlements is the actual rental value of the lands and revenue consists of a fraction of the assets of the estate annually received. These assets consist of total annual rents, calculated rental value of all lands of the proprietors and of miscellaneous profits accruing from waste lands, grazing grounds, wild fruits etc.

In Agra settlements are made collectively with village bodies, although one of the co-sharers is made liable for the payment of the land revenue, but all co-sharers are jointly and severally liable for the land revenue. In making settlement with village communities, the Agra Talukdars are disposed of by paying them 10 per cent of the land revenue directly from the state treasury.

In United Provinces, the Settlement Officer classifies villages according to soil characteristics and physical character. The rent for each class of soil is then determined, the cash rental of lands forming his basis of calculations. In case there is no cash rent, he calculates his revenue by comparison with similar lands in the village.

In Oudh the settlement is basically the same as in Agra, except that in Oudh it is generally made with individual Talukdars for an estate, comprising several villages.

In East and West Punjab, although revenue is collected jointly from joint holders of village estates, the share of revenue due from each is distributed and can be recovered separately. The share of the state has been fixed at one-fourth of the net assets and the period of settlement has been extended to 40 years under the Punjab Land Revenue Amendment Act of 1929.

Although the basis of Malguzari settlement of Central Provinces is the same as in Agra, the Mulguzars have been recognised in Central Provinces as proprietary landlords of villages, which are fundamentally ryotwari in character. In fixing land revenue with individual Mulguzars, the Settlement Officer therefore has not only to fix the revenue demand of the state to be realised from Mulguzars, but also to determine the rent payable by all classes of tenants to Mulguzars. The fixation of rents is done on the basis of "soil units" which are related to the productive capacities of the soils.

The Ryotwari System in Madras:—The Ryotwari Settlement is made in Madras on the basis of an accurate village map, giving accurate surveys of land holdings and rights. The productivity of lands is assessed and land revenue is fixed at one-half of the net produce of the land. Various types of concessions are allowed according to transport, irrigation and other considerations.

The Ryotwari System in Bombay :—After a period of trials and errors, Bombay evolved the Ryotwari System, which was well laid in 1796 under the initiative of Mr. Goldsmith and Lieutenant Wingate. The position and status of the cultivator have been defined by the Bombay Land Revenue Code of 1879. The tenure thus created is known as ryotwari under which the proprietary cultivator holds his land direct from the Government. Full occupancy tenure is hereditary, transferable and alienable without the sanction of the Government. The occupancy is liable to forfeiture on default of payment of revenue. No taxation is imposed on account of improvements effected upon land.

In Bombay land surveys are made and survey numbers, once fixed, are unalterable and soils are classified according to physical characteristics, fertility, etc. Lands are divided into several groups and expressed in fraction of a rupee, 16 annas representing the best class of soil. This kind of classification of soils is made to utilise it as a basis for distribution of the

total revenue demand fixed for the area rather than to base the assessment on the net produce as in Madras. Under the Bombay Land Revenue Code (Amendment) Act of 1939, in fixing the assessment, lands in a Taluka are divided into homogeneous groups on the basis of physical configuration, fertility, rental values, prices of agricultural products, transport, etc. The standard rates are fixed for each group, which mean the normal assessment per acre on land in that class of 16 annas classification value. These standard rates are so determined that the assessment does not exceed 35 per cent of the average of the rental values of such lands for 5 years immediately preceding the settlement period. The rental value is formally adopted as the basis for fixing the maximum assessment. After fixing the revenue liability of the aggregate, the land revenue assessment of individual survey numbers and subdivisions are afterwards made. If the maximum rate be Rs. 5 per acre for the 16-anna field, a sum of Rs. 2-8 would be assessed on a field classified as 8 annas.

The Bombay system of land revenue assessment is empirical and the system has been made desirably elastic by empowering the provincial Government to vary the assessment in any year according to changes in prices of agricultural products, where the settlement is made specifically in reference to prevailing prices of agricultural commodities. Any increase in assessment following a revision is limited to 25 per cent on the total for a whole Taluka and a Group, and 50 per cent on that of a village and survey number or sub-division.

The Revenue System in Assam :—There are Permanent Settlement landlords in some areas of Assam. There are also permanent cultivators with landholder's title, based on occupation of land for 10 years before the Regulation, on lease or grant of settlement for 10 years. Large areas of lands are also held on annually renewed permit or patta, or at least on a lease which is for less than 10 years. Tea gardens are held on leases for long periods at low rates of assessment. After the expiry of the lease, the assessment cannot be higher than that payable on the most highly assessed lands in the district cultivated with ordinary agricultural crops.

Land Revenue : A Tax or Rent :—Whether the land revenue is a tax or a rent is a bone of contention. It is allied

with the controversy whether the state is the landlord or private owners are proprietors of land. Arguments can be produced on either side with equal soundness. It is useless to indulge in these controversies, because the practical application of the land revenue is really the important thing.

If private ownership of land is admitted, then the land revenue is clearly a tax. It has however been pointed out that the land revenue is more akin to rent than tax in practical application.

In discussing the question whether the state is the landlord or the private owners are proprietors of land, it is clear that in permanently settled areas private property in land is beyond dispute, while state ownership is an accomplished fact in case of Khasmahal lands and waste lands. The position remains controversial in regard to Ryotwari areas. The cultivator holds the land subject to the payment of the land revenue. In these ryotwari areas, the state has recognised full proprietary rights of cultivators or tenants subject to the payment of the land revenue Even in Zemindari areas it may be said that rights of landlords are recognised subject to the payment of the land revenue. On a very close scrutiny, it is found that neither the private owners are full proprietors nor is the state the supreme unqualified landlord. The entire position for all practical purposes is restricted state and private ownership. As the state fully recognises private properties in land, the state regards the land as hypothecated to itself as security for the land revenue assessed on it.

In view of the above fact that ownership of land is neither full-fledged state ownership nor private one, the land revenue in India is also peculiar. It is neither a tax nor a rent. It partakes of the characteristics of both a tax and of a rent. The Taxation Enquiry Committee held that the land revenue should be regarded as a tax but on the ground that it forms a deduction from the national dividend. It has been argued that as the land revenue is fixed for a term of years, it is nearer a rent than a tax, but it should be pointed out that there is nothing to prevent the state from increasing the land revenue before a term of settlement expires. In addition rentals on private lands are not necessarily fixed for a long period. That the state allows concession in matters of waste and grazing lands does not detract from the land revenue the quality of a tax. Although provinces are now levying agri-

cultural income-tax, it does not necessarily confirm the land revenue as a rent.

Ricardian Theory in relation to the Land Revenue in India :—The Ricardian rent represents a differential surplus between the produce of the superior land and that of the marginal land, which produces just enough to meet all expenses of production. In India there is no scientific basis of calculating the so-called surplus, because elements like labour of the cultivator and of his family is not deducted from the gross value. The rental values which are the basis of assessment in Northern India are often higher than the true economic rent due to the fact that cultivators have no alternative occupation. There is no competition as cultivators have got to stick to land. Land rents are apt to command a premium, because there is a traditional bias in favour of land investment. In addition, several uneconomic holdings pay a land revenue, although they do not produce any surplus. As the principles governing assessment vary from province to province, the economic rent in the Ricardian sense bears no certain relation to the assessment of the land revenue in India.

The Land Revenue considered from Principles of Taxation :—That the land revenue is fixed for a period of settlement satisfies the first canon of taxation, namely, certainty, although there is an element of uncertainty associated with the revision of assessment, as the basis of assessment is still vague and ununiform.

Regarding the canon of convenience, the land revenue is payable in instalments according to the convenience of cultivators. Here again a certain amount of inconvenience has been inevitably created by basing settlements on averages of good and bad years and cultivators in consequence find it inconvenient to meet average demands during bad years. Cultivators by nature are not trained to provide bad years by savings during prosperity. The system of allowing rebates during bad years is usefully practised. If revision at the end of a settlement period results in enhancement, cultivators are hard pressed. In order to alleviate such hardships, the practice of progressive and graduated imposition of large enhancements is usually followed.

In reference to the canon of economy, it should be observed that although charges of revenue establishment are high, the

departments are also doing other works in addition to assessment and collection of revenue.

As regards the canon of ability to pay, it may be observed that the land revenue has been progressively reduced. The Taxation Enquiry Committee showed that the land revenue increased by 20 per cent from 1903 to 1924, while prices rose by 117 per cent.

Owing to the fact that different principles and systems are pursued by different provinces, it is rather difficult to assess the incidence of the land revenue. There are even inter-district variations in the systems of land revenue. The burden of the land revenue is unevenly distributed throughout the country.

Analysis of the Land Revenue System in India :—We have already seen that the principles of assessment vary from province to province and even between district and district. In United Provinces, East and West Punjab and Central Provinces, the theoretical basis of assessment is the economic rent, in Madras the net produce and Bombay rental values modified by empirical considerations.

Although rental values are more definite and accurate in determining annual profits than any other data, the success of such a system depends upon collection of rental statistics. Rental statistics should be used with great discretion, because more often than not rental values may be higher than economic rents. The Bardoli Committee of Bombay therefore recommended that attempts should be made to collect reliable sale and rental statistics and then these should be considered for assessment purposes in reference to other factors like communications, market prices, crop experiments, economic conditions, etc.

Whether the term of settlement should be made for a long period or short period depends upon practical expediency. It is true that a long period term of settlement is less vexatious and likely to give the cultivators sufficient time to prepare themselves for enhancements during the next revision, the long term settlement is likely to prevent the state from participating in the enhanced values and unearned incomes, following general improvements in the economic situation. A long-term settlement with an increase in the period of revision appears to meet general approval.

The Taxation Enquiry Committee recommended that a uniform basis of annual value should be adopted in every province. Annual value means the gross produce less cost of production, including the value of the labour actually expended by the farmer and his family and the return for enterprise. In case of rents controlled by tenancy laws or customs or where the rent is fixed by settlement officers, the Taxation Committee recommended that such rents should be adopted as the annual value. The Committee also recommended that the state's share of revenue should not exceed 25 per cent of the annual value. Along with these measures, it is desirable that limits should also be imposed upon sharp enhancement of assessment and in this connection it may be mentioned that the Bombay Land Revenue Assessment Committee recommended that the limit of enhancement should be a general all-round limit of 25 per cent.

Certain legislative measures have been passed by provinces to reform their land revenue systems. As most of the areas in East and West Bengal, Bihar and Orissa are under Permanent Settlement, such legislation was not considered necessary in these provinces. Under the Punjab Land Revenue Amendment Act of 1929, the states's share was fixed at one-fourth of the net assets and the period of settlement extended to forty years. The Bombay Land Revenue Code (Amendment) Act was passed in 1939, embodying the recommendations of the Bombay Land Revenue Assessment Committee appointed in June, 1924. The Act regulates the assessment in the province and limits settlement to a period not exceeding 30 years, unless the Government deems it inexpedient to revise any settlement. The Act regulates the rates of assessment and enhancement and exempts improvements effected by farmers from enhancement. Provision has been made for the publication of the Settlement Report in each village. A Revenue Tribunal has been constituted by the Act of 1939, to whom objections regarding settlements may be filed. The Government has also been empowered to adjust assessments according to fluctuations in prices.

The National Planning Committee of the Congress recommended the abolition of the Zemindari system and all provinces are now committed to this reform. The United Provinces Government has already started a Zamindari Abolition Fund. The Madras Government has already passed the Zamindary

Abolition Act. The Governments of United Provinces, Bihar and Assam have also introduced the State Acquisition of Zamindaries Bill. It is true that the system of Zamindari has outlived its utility and throughout India a uniform system of land tenure should be gradually enforced by bringing all tenants under direct contact with the state. At the same time it should be remembered that such a reform entails heavy expenditures, because the owners must be awarded due compensation. In view of strained provincial finances, it is desirable to halt this reform for the time being and provinces should go ahead with other urgent reforms of great social and economic values.

Irrigation

Imortance of Irrigation in India :—Agriculture being a staple occupation in this country irrigation as an aid to agriculture is of supreme importance. Tracts like Rajputana and East and West Punjab are practically rainless. The rain water is again unevenly distributed in areas of the Deccan. Besides, owing to the necessity of producing winter crops, several areas in India require artificial water. Irrigation is the only source of assuring the supplies of regular and adequate water facilities.

By helping agriculture, irrigation has definite economic values. It stabilises agriculture, prevents famines and adds to agricultural prosperity.

Categories of Irrigation Works :—There are three broad classes of irrigation works, namely wells, tanks and canals. Canals are inundation, perennial and storage ones.

Irrigation by wells including tube wells is of fundamental importance in India, where 25 per cent of the total irrigated area is under well irrigation. These are mostly private works, although governments encourage them by grant of takavi loans. The Agricultural Department encourages the utility of well irrigation by promoting subartesian bores and power-pumps. Co-operative well irrigation is also encouraged.

Tank irrigation is quite popular in India and has largely developed in Madras. There should be renewed state initiative in recovering silted tanks and the Government of Madras has been taking active steps in this direction.

Canal irrigation has been extensively encouraged in India by the Government. Canals are fed with waters from rivers or from

artificial storage. River-fed canals have been built up along the region served by the Himalayan rivers, which flow throughout the year, the snow on the mountains serving as an inexhaustible reservoir. They are also found in Madras. These canals are classified into Inundation canals and Perennial canals. Inundation canals are drawn directly from the river without the use of any barrage. They do not receive water until the river is flooded and reaches a certain level. The supply of water in the canal in consequence fluctuates with the flood level in the river. Lands in Sind and East and West Punjab are largely fed by such canals, which receive water from the Indus and Sutlej. In order to remove such dependence on flood level, the Sukkur Barrage in Sind was constructed in 1932 by building a barrage across the Indus, by means of which it has now become feasible to maintain the water in the canals above it at a sufficiently high level to provide flow irrigation throughout the year.

Perennial canals are built by erecting some form of barrage across a river which flows throughout the year and diverting its water through a canal to the country to be irrigated. They are thus free of the natural level of water in the river. These canals are found in United Provinces and East and West Punjab.

Storage works are built by constructing a dam across a valley to store the rain water during the monsoons. The water so held is later distributed to lands by means of canals drawn from the storage. These works are found in the Deccan, Central Provinces and Bundelkhand.

It thus appears that most of the canal irrigation works went to Pakistan following the division of the country. Pakistan obtained about 28 per cent of the total irrigated area of undivided India, although Pakistan's share in cultivated area is 13 per cent. The share of Eastern Pakistan in the total area under irrigation in Pakistan is about 15 per cent only as most of the irrigation area is concentrated in Western Pakistan. The following tables illustrate the position of irrigation in India and Pakistan:—

TABLE I

AREA UNDER IRRIGATION (In '000 Acres)

Indian Union:		*Pakistan.*	
Provinces (1938-39) ...	36,607	Provinces (1938-39) ...	17,055
States (1937-38) ...	9,072	States (1937-38) ...	1,693

AREA IRRIGATED BY GOVERNMENT CANALS (In '000 Acres)

Indian Union :		*Pakistan :*	
Provinces (1938-39) ...	11,502	Provinces (1938-39) ...	12,910
States (1937-38) ...	2,438	States (1937-38) ...	1,469

TABLE II

Provinces	Productive Works Area irrigated 1944-45	Unproductive Works Area irrigated 1944-45	Non-capital Works Area irrigated 1941-42
Madras	3,043,199	263,225	3,207,400
Bombay	11,954	437,176	207,500
Bengal (East and West) ...	...	231,598	31,800
United Provinces	3,826,689	1,531,981	5,500
Punjab (East and West) ...	14,110,148	726,882	29,600
Bihar	666,449	126.247	...
C. P. (excluding Berar) ...	...	676,476	44,900
N.-W. F. P.	220,592	309,143	...
Orissa	...	353,869	...
Sind	4,050,745	324,993	20,600
Rajputana	...	..	...
Baluchistan	124,123	22,330	...
TOTAL ...	26,053,899	5,003,920	3,547,300

TABLE III

AREAS IRRIGATED BY GOVERNMENT WORKS IN EACH PROVINCE

Province	Average area irrigated in triennium 1936-39 Acres	Area irrigated in 1944-45 Acres
Madras	7,396,100	6,509,399
Bombay	466,200	639,386
Bengal (East and West)	171,800	245,442
United Provinces	4,769,200	5,371,992
Punjab (East and West)	12,195,800	14,045,199
Bihar	679,500	744,948
C. P. (including Berar)	319,100	727,536
N.-W. F. P.	466,500	534,735
Orissa	366,400	798,179
Sind	4,692,900	4,256,587
Minor Administrations	...	46,416
Baluchistan	104,700	26,949
TOTAL ...	31,628,200	34,946,698

TABLE IV

Province	Net area sown in 1943-44.	Area irrigated by Government irrigation works.	Percentage of area irrigated to total area.	Capital cost of Government irrigation & navigation works to end of 1943-44.	Estimated value of crops raised on areas receiving state irrigation.
	Acres	Acres	Sown	(lakh Rs.)	(lakh Rs.)
Madras	31,890,989	6,461,450	20·26	2,052·2	5,214·02
Bombay	28,625,161	626,759	2·19	1,079·4	...
Sind	5,700,383	4,511,110	79·14	2,648·8	...
Bengal (East & West)	28,060,000	244,217	0·87	532·0	...
United Provinces ...	37,210,028	5,344,683	14·36	3,076·9	7,807·39
Punjab (East & West)	28,533,453	13,888,010	48·67	4,259·5	11,663·69
Bihar	17,658,400	780,104	4·42	356·1	...
C. P. and Berar ...	24,988,891	722,239	2·90	652·9	...
Orissa	6,296,451	826,277	13·15	328·0	...
N.-W. F. P. ...	2,300,551	528,359	22·97	316·5	...
Assam	6,928,175	...	...	...	...
Baluchistan ...	...	25,156	...	146·5	...
Minor administrations	804,852	55,408	6·88	29·6	...
TOTAL ...	218,997,334	34,015,772	15·53	15,478·4	...

Classification of Government Irrigation Works :—Until 1921, Government irrigation works were classified into (*a*) Productive, (*b*) Protective and (*c*) Minor.

Productive works were expected to yield within ten years of their completion a revenue sufficient to meet annual interest charges on their capital outlay, which was estimated at Rs. 114 crores in 1938-39 and the area thus irrigated rose from 4·5 million acres in 1878-79 to about 24,709,120 acres in 1938-39. They are mostly found in Madras and Northern India. Figures refer to undivided India.

Although financially not remunerative, protective works were essentially constructed to prevent famines and the cost of such works is charged to the current revenues and is generally met out of grants on famine relief and insurance. They nevertheless ensure economic stability of arid tracts like the Deccan. The capital outlay on these works came to Rs. 38·79 crores in 1938-39 with a total irrigated area of 2,884,259 acres. Figures refer to undivided India.

Minor irrigation works are of various kinds and included mostly tanks. They are financed out of current revenues.

The above classification was dispensed with from 1921, because all works of public utility could be henceforward financed out of loans. Irrigation works were henceforth classified into (*a*) Productive and (*b*) Unproductive. In addition, there are some areas which are irrigated by non-capital works.

Progress of Irrigation in India :—The Irrigation Commission of 1901 recommended the establishment of irrigation works both productive and protective. Productive works were recommended for Punjab, Sind and Madras, while protective ones for Bombay and Deccan.

Since the Reforms of 1919, irrigation became a provincial subject. The Central Government now collaborates with the Provincial Governments in handling major irrigation projects.

Irrigation made rapid strides after 1922. The Sutlej Valley Works in Punjab completed in 1932-33 at a cost of 33·31 crores are estimated to irrigate over 5 million acres. The large part of these works is now in Pakistan. The Sukkur (Lloyd) Barrage and Canals in Sind opened in 1932 at a cost of Rs. 24 crores are estimated to irrigate about 5½ million acres and are now located in Pakistan. The Cauvery Reservoir and Mettur Project in Madras inaugurated in 1934 are expected to cost 7·37 crores and irrigate over 3 million acres. The Mettur Project also provides for hydro-electric power. The Bhandardara Dam and the Lloyds Dam at Bhatgar were completed in 1925-26 in Bombay. The Sarda River Irrigation Scheme in United Provinces was put into service from 1928 and this was estimated to irrigate over a million acre. The Emerson Barrage in Punjab and the Ganges Tube-well Scheme in United Provinces were also completed. These are among the major irrigation projects completed during recent years.

The total capital outlay on productive works in India was estimated at about Rs. 103 crores in 1941-42 and the net revenue at over Rs. 10·66 crores, while the capital expenditure on unproductive works is over Rs. 38·79 crores. It may be observed that the rates charged for water vary from province to province.

The State in relation to Irrigation :—Although irrigation is now a provincial subject, the Centre generally takes a keen and

active interest in irrigational matters. It initiates and undertakes all major irrigation projects in collaboration with provinces.

There are two central statutory bodies for the Indian Dominion. The Central Board of Irrigation with a Research Committee and a Bureau of Information and a Central Waterways, Irrigation and Navigation Commission. The Board meets every year, when papers of a technical nature are read and discussed. These papers are then published along with technical literature on specific questions in a monthly abstract and a quarterly journal. Of late the Board has broken new ground and has commenced to issue pamphlets for the layman explaining the works which are being undertaken by the Dominion engineers from time to time. For purposes of research and experiment in irrigation and hydro-dynamics, the Central Board has a station at Khadakvasla near Poona, called the Indian Waterways Experiment Station. There is now a proposal to extend the range of activities of this station and rename it as the Central Waterways, Irrigation and Navigation Research Station, and shift it to Delhi.

Besides the Government of India, seven Provinces, namely West Punjab, East Punjab, United Provinces, Sind, West Bengal, and Madras, and two States namely Hyderabad and Mysore also maintain research stations.

The Central Waterways, Irrigation and Navigation Commission was set up in 1945. Being a fact-finding, planning and co-ordinating body for India as a whole it has much wider functions than the Central Board of Irrigation. The Central commission prepares projects, initiates schemes for the training of Indian engineers in specialised fields such as waterways, navigation, irrigation, and finally advise the Government of India on disputes between Provinces or on the question of priority as between various projects of flood control, irrigation, navigation, etc. The Commission, of course, maintains a full time technical and administrative staff to carry on its functions.

Agriculture engaged special attention after India's Independence. The country has been faced with a chronic food deficit and the Government have been concentrating all attention on food front. The production in the country must be increased and in consequence it has become imperative to increase agricultural efficiency by developing both extensive and intensive

cultivation. Among the major factors to improve agricultural economy, it is realised that irrigation ranks pre-eminent. By eliminating precarious dependence on monsoons, irrigation stabilises agriculture and also makes it feasible to bring under cultivation a large area, remaining hitherto uncultivated due to scarcity of water supplies.

Multi-Purpose River Valley Projects :—The National Government have accepted the necessity for the conservation and utilisation of the water resources of the country for purposes of flood control, irrigation, power generation, navigation and allied facilities on a regional basis. Four of the large multi-purpose river valley development projects in India, namely, the Tungabhadra in Madras, the Bhakra Dam in East Punjab, the Damodar Valley in Bihar and West Bengal, and the Hirakud Dam in Orissa, are now under actual construction; some other projects are ready for sanction and execution; others still are in various stages of investigation and preparation; there are several areas of potential development, particularly in the States, to which it has not been possible so far to give even preliminary consideration. It is expected that these schemes when completed will be able to irrigate 25 to 30 million acres and generate 4 to 5 million killowatts of electricity.

The Damodar Valley Scheme :—The Damodar Valley Corporation Act has been passed, setting up an autonomous public corporation, which has been entrusted with the execution of the scheme. The Corporation was formally inaugurated in July, 1948.

Though the Damodar is relatively a small river, the flood damages caused by it in the past have been exceptionally severe. Agriculture in the Lower Valley suffers from monsoon floods almost every year. The damages are particularly heavy in years of devastating floods which occur periodically. Such floods are a perpetual threat to the main arteries of rail and road communications. Because of the high fertility of agricultural land in Lower Valley and of the large amount of capital already invested in the area exposed to the flood hazard, the damages likely to be caused by floods are proportionately far more serious than almost in any other river valley in India. As a flood insurance policy the justification of the Scheme is obvious, as it will insure high values representing the landed property and the

fixed capital assets, against flood contingencies at a comparatively low "premium".

The regulated Damodar will make it possible to service at least nine lakh acres of fertile alluvial soil with perennial irrigation. About a fifth of this area is already under full or partial kharif irrigation. On the other hand, what are fallow waste lands now will be available for cultivation after the elimination of floods and the provision of irrigation facilities. There is no reason why in the long run year-round cropping should not become the practice in this region. The long-term land-use programme of the Corporation will include such measures as water control on land, erosion control, scientific crop rotation coupled with a drive for increasing the intensity of cropping, use of manures and fertilisers, farming, a gradual switch-over readjustments that may be necessary to raise agricultural income. Possibilities for fresh cultivation will greatly increase in consequence of the scheme. If the reservoirs, river channels, irrigation canals, and the numerous tanks and ponds are properly utilised for the purpose, the Valley will become a substantial source of fish supply which would go a long way to meet the requirements of the industrial areas in and around the Valley and of the large Calcutta market.

The combined hydro and thermal capacity under the Scheme will amount to about 400,000 KW. The abundance of coal will make it possible to step up power output as the load increases, by setting up additional thermal stations. The thermal plant at Bokaro with 200,000 KW capacity will be erected first. The Corporation proposes to take steps to facilitate the electrification of the railway system as far as possible so that large quantities of high-grade coal now consumed by the railways may be released for the metallurgical industry. The electrification of the railways, say between Calcutta and Moghulsarai, will greatly relieve traffic congestion by cutting down the volume of coal shipments and making possible faster and more frequent train movements. The eighty-mile-long navigable channel connecting the Damodar at Durgapur with the Hooghly about thirty miles above Calcutta will be another important factor in cheapening transport and relieving traffic congestion in this vital areas. The Damodar power system will make it possible to preceed expeditiously with the electrification of the coal mines. The Valley

contains rich deposits of coal, iron ores and other minerals and is therefore suitable for the starting of heavy industries and mention may be made of the Loco Building Works Projects at Chittaranjan Fertiliser Factory at Sindhi, both of which are now in progress. The development of several electro-chemical industries in this area is now being jointly planned by the Governments of Bihar and West Bengal and the Corporation. In its industrial potentialities, the Damodar Valley possesses the same significance for India as the Ruhr Valley for Germany and the Monangehala Valley for the United States.

With floods eliminated and abundant supply of water and power assured, one may safely reckon with the rapid development of many key industries in the Valley. The Damodar Valley is the mineral storehouse of India. It accounts for almost three-fourths of India's coal deposits and no less than nine-tenths of her present coal raisings; the rich iron ores of India are concentrated in around this region; some of world's best mica is produced in the Valley; substantial deposits of bauxite are also available in this region. In addition, there are deposits of a large number of other minerals. According to a special study made by the Geological Survey of India, there is scope for no less than 110 industrial units of different types in the Valley because of its mineral wealth.

Other Selected Multi-Purpose Projects:—In West Bengal, the Mor Reservoir Project has already started. This project contemplates the construction of a dam on the river Moorakshy at Messenjone and a barrage near Suri in Birbhum district. The reservoir will have a capacity of 1 million acre feet and irrigate an area of 600,000 acres of land. The scheme is estimated to cost over seven crores of rupees.

The Kosi project has been planned on the Kosi river in Nepal and North Bihar. This multi-purpose scheme envisages two barrages. The first dam is expected to irrigate about 1 million acres in Nepal and generate 1·8 million kilowatts. The second dam is anticipated to irrigate about 2 million acres in Bihar. The entire scheme is to cost 85 to 95 crores of rupees. The survey work has started and when the project is complete, navigation will be possible from the Kosi reservoir to the Ganges

and this means that Nepal will be opened up and ships can pass from Calcutta right up to Nepal.

The Mahanadi multi-purpose project in Orissa is designed to create three dams, e.g., Hirakud Dam, Tikarpara Dam and Naraj Dam, each with its own canal system and hydro-electric power installation and these three will be integrated later for the development of the valley as a whole. It is expected to irrigate about 2½ million acres of land and the electric power will be utilised to exploit manganese, iron, coal and bauxite deposits.

The Narmada-Tapti project is planned in Central Provinces and Bombay and is expected to irrigate about 1 million acres in Central Provinces and 110,000 acres in Bombay, and to generate 1 million kilowatts.

The Ramapadsagar project is proposed on the river Godavari in Madras. It is expected to irrigate about 2·3 million acres and generate about 100,000 kilowatts.

The Tungabhadra Dam has been planned by the Governments of Madras and Hyderabad. It is anticipated to irrigate about 300,000 acres and generate considerable electric power.

Punjab has been the classic home of irrigation projects of the modern type. The capital expenditure of the Punjab (East and West) on the major canals has been in the neighbourhood of 40 crores and the annual gross revenue has been estimated at about 6 crores. With the formal opening of the Thal Canal in January 1947, it may be said that Punjab at any rate has reached a point when the water resources of its rivers have been utilised almost to the full. Development from now on must be along the difficult and expensive path of storage and pumping of sub-soil water by means of tube wells.

The Thal barrage which is situated at Daudkhel 3 miles from Kalabhag on the Indus in West Punjab will irrigate an area of 350,000 acres in the districts of Mianwali and Shahpur and produce 750,000 tons of food grain. With the opening of the Thal project the last available block of waste land in West Punjab has been brought into cultivation. The canals have been lined with concrete and the whole project has cost 2 crores of rupees.

About 1860 tube-wells are going to be constructed for the water-logged parts of the Jhelum canal area. The power for the

operation of these wells will come from hydro-electric stations to be installed at Rasul by getting water drop from the upper to the lower Jhelum canal.

A scheme which is under investigation by the East Punjab Government is the Bhakra multi-purpose project. The project is estimated to cost 42 crores of rupees. The Government of Patiala State which can be linked up with East Punjab has also an irrigation project in view called the Dochi Project estimated to cost 5 crores.

In Sind which is well served by irrigation works two more dams are expected to be built, one in Upper Sind and the other in Lower Sind. The Upper Sind barrage will be located at Gudu 90 miles above Sukkur. The total cultivable area to be irrigated will be about 2,323,600 acres and the estimated cost is about 12 crores. The Lower Sind barrage will be located at Hajipur. The total cultivable area to be irrigated is about 2,569,400 acres and the estimated cost will be 12 crores.

Tube-Well Irrigation :—The Government of India has evolved an ambitious programme of tube-well irrigation. The total cost under the tube-well construction scheme comes to Rs. 68·95 crores of which Rs. 23·08 crores will be required in dollars, Rs. 11·92 crores in sterling and 33·95 crores for expenditure inside India.

Sample experiments conducted in East Punjab, United Provinces and Bihar have indicated sub-soil water, which can be utilised for irrigation. Although in some of these areas there are canals a large portion of the territory will have to depend on sub-soil reservoir if any intensive cultivation programme is to be undertaken. These provinces propose to construct 4,565 tube-wells during the next three years beginning 1949-50 and the necessary help by way of equipment, technical staff and finance has to be arranged by the Government of India, so that at least 1,000 tube-wells could be constructed every year for the next two or three years. In other provinces, the existence of ground water in adequate quantities and at economic depths has yet to be proved for which extensive exploratory borings will be needed before large tube-well schemes could be formulated. Practically, all the tube-wells in use for irrigation purpose in upper India were constructed by the old hand-boring methods. These

methods are slow, taking sometimes several months to complete well. They are also ineffective in hard clay and rock strata and for deep boring. To expedite the construction programme, it is considered essential to introduce in India the use of up-to-date mechanical boring apparatus such as is used in the United States and other advanced countries.

Pakistan :—The Pakistan Development Board proposes to spend about Rs. 14 crores on irrigation, which is estimated to bring under cultivation an additional acreage of 5 millions.

The Pakistan Government also proposes to develop Lower Sind Barrage project and to introduce collective farming in that area. It also proposes to undertake the development of the Thal project of West Punjab.

CHAPTER X

RURAL INDEBTEDNESS

The volume of Rural Indebtedness in India :—The volume of rural indebtedness has been estimated by various authorities at different periods. Sir Edward Maclagan calculated it at about Rs. 300 crores, while M. L. Darling put the same around Rs. 600 crores for British India in 1924. The Provincial Banking Enquiry Committee estimated the extent of rural indebtedness at over Rs. 1200 crores. After the division of India it follows that the total debt of about Rs. 900 crores came to India, leaving the balance of Rs. 300 crores to Pakistan. Without claiming accuracy of the actual figures of debt, it may be safely conceded that the volume is exceptionally high and is a nightmare in Indian agriculture. It is one of the fundamental causes of rural and agricultural backwardness in India. Besides, a huge part of the debt is unproductive.

Causes of Rural Indebtedness :—Although rural indebtedness is due to a multiplicity of factors, the following are among the principal causes. The excessive pressure of population on land, giving rise to excessive sub-division and fragmentation of holdings, the decline of the rural cottage industries depriving cultivators of a subsidiary occupation and poor and deficient physical health of cultivators. The higher cattle mortality drives the peasants to the doors of money-lenders. The insecurity of harvests following precarious dependence on monsoons is also an important contributory cause. As cultivators having less than subsistence income can ill afford to provide for a depreciation fund, they take recourse to a loan to re-equip their capital equipment. Excessive love of litigation involves the Indian peasants in unnecessary expenditures. Though the cultivator is inherently frugal in habits, he is perforce made to spend extravagantly on social and religious ceremonies like marriages, sradhs, etc., due to his ignorance, prejudices and tradition. The burden of ancestral debt is often heavy and this is enhanced by the fact that a cultivator honours ancestral debt by tradition, irrespective of any

legal validity. The value of land has risen in recent years owing to a fundamental change in India's economy, following improved transport system, higher prices of agricultural commodities, etc., and this has enabled the cultivators to raise further loans on the security of land.

The indigenous money-lenders are particularly the only source of credit in rural India. Inspite of co-operative credit societies, land mortgage banks and other kindred credit agencies, the money-lenders are as yet the most important fountain of agricultural credit. Unfortunately, however, they have abused their position of privilege. By charging an usurious rate of interest combined with the system of compound interest they bleed the cultivators white. In addition, they extract illegal money through false accounts and other malpractices. However a devil he may be, a money-lender fulfils a useful role in rural credit by supplying ready money and the real solution therefore lies in rectification of the money-lender and not in his elimination. It is alleged that the land revenue with its usual rigidity of collection has also contributed to the rural indebtedness. As the land revenue forms an infinitesimal part of the total debt, it should be regarded as a minor cause and the recent reforms of the land revenue have gone far towards meeting the grievances of the cultivators.

The State in Relation to Rural Indebtedness :—In view of the seriousness of the problem of rural indebtedness, the government has taken measures from time to time to combat this evil. In legislating against abuses of money-lending, all Governments have been confronted with the delicate task of introducing reforms without impairing the existence of money-lenders, who constitute the only source of rural credit.

Changes have been made in the Code of Civil Procedure to safeguard the agriculturists against court decrees. *e.g.*, agricultural tools, implements, cattle, household materials have been exempted from attachment or sale. The agriculturist debtor is exempt from arrest for a court decree and is allowed convenient instalments to repay loans. The Contract Act was modified by the 1899 Act to protect the agriculturist debtor by extending the scope of the term "made influence" to cover all cases in which any unfair advantage is taken by the money-lender. The Usurious Loans Act as amended in 1918 seeks to determine the legal and maximum

amount of interest recoverable, reduce the rate of interest chargeable and fix a maximum rate of interest. This Act was amended in 1926 to include cases in which either party to a mortgage seeks relief. East and West Bengal, Assam, Central Provinces, East and West Punjab, United Provinces, Madras, Bihar and North-West Frontier Province amended this Act, making it obligatory upon a Court to re-open the account and reduce the rate of interest as prescribed in the amending Acts. The money-lender is to register himself and take a license in Central Provinces, Bihar and East and West Punjab. The Bengal Money Lenders' Act of 1939 and the U. P. Money Lenders' Act of 1939 made similar provisions, which are also found in Orissa legislative enactments. The Deccan Agriculturists' Relief Act of 1879 was replaced by the Bombay Debtors' Relief Act (Amendment) in 1941 providing for the establishment of a Debt Adjustment Board for any area in the province.

Nearly all provinces have now legislative enactments providing for compulsory keeping of books of accounts by money-lenders, who must submit to debtors periodical statements, disclosing outstanding debts and all repayments made by debtors.

Almost all provinces have now passed legislation prescribing the maximum rate of interest chargeable on secured and unsecured loans. The United Provinces Government vary the maximum rate from time to time. Nearly all provinces also follow the practice that in no case can the interest charged exceed the total value of the loan. The various provincial enactments to regulate money-lending aim at preventing molestation and intimidation of debtors.

In analysing the effects of these money-lending enactments, it is generally found that the supply of rural credit tends to contract in areas, where these legislative enactments are rigidly enforced. Care should be paid to see that credit does not dry up to the detriment of the cultivating class.

Debt Conciliation Measures:—Almost all provinces have been vigorously pursuing the programme of debt conciliation on a voluntary basis by passing Debt Conciliation Acts, constituting Debt Conciliation Boards, *e.g.*, Debt Conciliation Act of Central Provinces and Berar (1933), Punjab Relief of Indebtedness Act (1934), Bengal Agricultural Debtors Act (1935), Assam Debt

Conciliation Act (1935), Madras Debt Conciliation Act (1936) and Sind Debt Conciliation Act (1939). These Acts aim at scaling down the debts by mutual agreement between the debtor and the creditor through the mechanism of Debt Conciliation Board, composed of officials, non-officials, representatives of creditors and debtors. Any agreement so reached is registered under the Indian Registration Act and has the force of a court decree. The conciliated amount is repayable in instalments and no further interest accrues after settlement. Generally the rule of Damdupat is followed, that is, interest charged should not exceed the loan amount. The Bengal Act also provides for compulsion where conciliation fails and also for a simple insolvency procedure.

Debt Conciliation Boards in Central Provinces and Berar scaled down debts of over Rs. 9 Crores by about 50 per cent at the end of 1938. In Bengal debts to the tune of Rs. 5 Crores were scaled down by 1939. Satisfactory progress was also registered in Assam and Punjab.

Although the conciliated amount is payable in instalments spread over usually from 15 to 20 years, cultivators often default and it has therefore been urged that the movement for conciliation will gain momentum if arrangements could be made to pay the conciliated amount through Land Mortgage Banks. The Government of Central Provinces and Berar in consequence started Land Mortgage Banks, which number over 21. Madras made great strides by developing more than all such Land Mortgage Banks.

It was later felt that in order to expedite the above reforms, it is necessary to provide for compulsory scaling down of debts and necessary legislation was accordingly adopted in Madras, Central Provinces, United Provinces and Bombay. The Madras Agriculturists' Relief Act of 1938 provides for compulsory scaling down of liabilities. It also stipulates that after the Act the rate of interest on all debts cannot exceed 6¼ per cent, which is alterable by the Provincial Government from time to time. Madras has scaled down debts to the extent of over Rs. 6 crores by about 48 per cent within the year 1941. The Central Provinces and Berar Relief of Indebtedness Act of 1939 substitutes compulsory methods of scaling down debts in the old Act of 1933 by instituting Debt Relief Courts instead of Conciliation Boards unlike in Madras, which retains the machinery of Debt Conciliation Boards.

The rate of interest on loans has been fixed at 4½ per cent compound interest with yearly rests or 6 per cent simple interest on secured loans and 9 per cent on unsecured loans. The Act legalises the transfer of land in lieu of debt. The Bombay Agricultural Debtors' Relief Act of 1939 provides for compulsory scaling down of debts through Debt Adjustment Boards. The scaled down amount is repayable in instalments not exceeding 25 in number. If the creditor agrees to a reduction equivalent to 50 per cent of the assets of the debtor, the creditor may be paid the scaled down amount in bonds to be issued by the Provincial Land Mortgage Bank. The United Provinces Agricultural Debt Redemption Act of 1939 also made provision for the compulsory reduction of debts.

In order to prevent the passing of agricultural lands into the hands of non-cultivators, provinces have made several provisions in their various legislative enactments, restricting the right of transferring agricultural lands to non-agriculturists. The Punjab Land Alienation Act of 1901 is an outstanding piece of legislation in this direction. It provides that non-agricultural classes are not allowed to buy land from a member of an agricultural tribe nor take it in mortgage exceeding 20 years. This Act failed to stop the process of concentrating lands into the hands of an agriculturist money-lender. In 1938, two amendments were therefore passed, making all Benami transactions illegal and included the agriculturist money-lender in the same category as other money-lenders. The Punjab Restitution of Mortgages Lands Act of 1938 enables a mortgagor to present a petition to the Collector praying for the restitution of possession of the land mortgaged period to 8th June, 1901 under certain conditions. Other provinces have also by law restricted usufructury mortgages to a reasonable period. The United Provinces have given facilities to redeem certain old mortgages.

State Provision of Agricultural Credit:—In order to provide agriculturists with credit, the Takkavi Acts were passed in 1871, 1876 and 1879. Takkavi loans granted to cultivators only for specific purposes were never popular. These loans have been rather inconvenient from the standpoint of cultivators, owing to official red-tapism, rigidity of collection and inelasticity.

The Land Improvements Loans Act of 1883 was passed for the purpose of extending long-term loans, aimed at effecting land

improvements, irrigation, etc. The Agriculturists' Loans Act of 1884 provided for short-term agricultural loans to meet expenses on account of purchases of seed, cattle, manure, etc. As these loans were not given for the redemption of old debts and consolidation of holdings, the Madras and United Provinces Governments made provisions for loans for such purposes in their Amending Acts.

In spite of all these financial aids, it has been found that the state provision of agricultural credit falls far short of requirements. It has been discovered that the problem of rural credit is of supreme importance for the rehabilitation of Indian agriculture. The scaling down of debts is only one blade of the solution and the revival of agricultural prosperity will be a reality if provision is made for the supply of necessary agricultural credit on reasonable terms and conditions. It is now agreed almost unanimously that the problem of rural credit in India can be tackled effectively through the mechanism of the co-operative movement.

CHAPTER XI

THE TECHNIQUE OF INDIAN AGRICULTURE

Agricultural Labour :—The cultivator and the labour which is hired and engaged in agriculture in India have been found to be deficient. In order to improve the agricultural economy, the efficiency of labour must be stepped up.

Amongst several schemes of reform to revitalise the agricultural labour, a comprehensive scheme of rural education is urgently called for. The defects of the modern system of education were clearly pointed out by Messrs. Abbott and Wood in 1937, the Zakir Hussain Committee appointed by the Wardha Education Conference of 1937 and the Committee on Vocational Training appointed by the Government of Bombay in 1938. The Zakir Hussain Committee endorsed Mahatma Gandhi's idea that education should be given through the medium of some craft or productive work, which should provide the nucleus of all other instructions provided in schools. This type of practical education would be admirably suited to rural areas.

In order to relieve the rural masses of illiteracy, prejudices and spendthrift habits, it is necessary to evolve a compulsory and comprehensive scheme of rural education consisting of primary and secondary stages. The system of rural education should be supplemented by an intensive programme of rural reconstruction. Propagandas ought to be conducted in rural areas to educate the masses by means of radio, cinema and kindred media.

It is gratifying to observe that the National Government of India proposes to launch in a comprehensive scheme of primary education in the near future. This will supplement the various provincial schemes of primary education, designed for the uplift of the rural masses.

Physical Drawbacks of Rural Population :—The health of the rural masses is far from satisfactory due to the prevalence of manifold preventible diseases, like malaria, plague, cholera, small pox, dysentery, kalazar, hookworm, leprosy, tuberculosis etc.

In order to mitigate the ravages of diseases, an intensive campaign of public health and hygiene should be started throughout the countryside. Baby weeks, Red Cross and Health centres can also be extremely useful in this regard. The absence of medical facilities in the villages is an outstanding feature and this should be met by starting co-operative dispensaries, state hospitals and encouraging the growth of Ayurvedic medicines in the rural areas.

In the countryside, housing is also a great problem. Rural slums are as great evils as urban ones and should be removed by building suitable houses through co-operative societies.

According to the recommendations of the Bhore Committee, the Government of India has initiated a scheme of Public Health by opening Health Centres in several parts of the country.

Methods of Cultivation:—Although the average holding in India is comparatively small, the Indian cultivator practises extensive cultivation and the yield per acre in consequence is poor. It is stated that Japan maintains a population of fifty-six millions on a cultivated area of seventeen millions, that is one-third of an acre per head against India's five-sixths of an acre. China also practises intensive cultivation. The Indian cultivator follows no scientific method of rotation of crops nor does he exercise discretion in selecting seeds. Recently, the provincial Governments have been making endeavours to assist cultivators by the provision of good seeds. Indian cultivators should be taught to introduce intensive gardening as in Japan and China.

Manures:—The Indian cultivator mostly uses cowdungs as manures and a good portion of this farmyard manure is wasted as fuel. Broadly speaking, it may be said that there is very little use of manures and fertilizers in Indian agriculture. This is due to the ignorance of the cultivators, who are also handicapped by lack of financial resources.

The Imperial Council of Agricultural Research constituted a Standing Fertilizers Committee in 1931 to investigate into the problems of manures and fertilizers and to conduct research on fertilizers. Ammonium sulphate, bonemeal, fish manures and oil-cakes are gradually becoming popular. Imports of artificial manures in India rose from 21,590 tons in 1925-26 to 108,000 tons in 1939-40.

As the present supply of fertilizers in India is very low, the Government of India has decided to meet this problem in right earnest. It is estimated that the total requirements of sulphate of ammonia for the next four years would be 1,523,200 tons beginning from 1948-49. This will cost Rs. 71·57 crores of which Rs. 15·22 crores will be required in dollars and Rs. 30·46 crores in sterling and the balance of Rs. 25·89 crores for expenditure inside India. This forms a part of the Government of India's Rs. 282 crores Scheme to increase food production. The Government of India has already established a pool from which fertilizers allocated by the International Emergency Food Council or produced locally are distributed to provinces according to their requirements.

The Government of India has also started a fertilizer factory at Sindri and this is expected to produce over a lakh tons of fertilizer a month, when the factory goes into full production.

Implements :—Broadly speaking, the Indian cultivator uses his old type of simple implements which are cheap and within the capacity of draught oxen. Improved implements are essential for increasing the productivity of Indian agriculture. Although iron ploughs, sugar-cane crushers and tractors are being used in some areas, they have been introduced only piecemeal. It is true that small holdings are an impediment to the introduction of scientific agriculture with modern mechanical devices, nevertheless attempts should be made to prepare the ground by consolidation of holdings preferably through the co-operative system. Attention should be paid to introduce co-operative and joint farming through modern machineries.

In order to mechanise Indian agriculture, the Central Tractor Organisation of the Ministry of Agriculture have started the programme of loaning tractors to provincial governments. Provinces have also been endeavouring to introduce tractors. The Bombay Government has popularised mechanical ploughing by tractors by charging Rs. 22 per acre or about four times bullock ploughing. The Government of India has also proposed to take a dollar loan from the International Monetary Fund to purchase bull-dozers, tractors and other large-scale farming equipment and fertilizers from the hard currency areas. In addition, the Government of India has been actively encouraging the production of agricultural machineries inside the country.

Livestock:—Cattle are the principal livestock of Indian cultivators. Cattle supply the motive power for ploughing, lift irrigation, carting etc. They are the only source of milk supply, ghee, butter, etc. Although India possesses a large number of cattle, they are so ill-fed and poor that there is a serious deficiency of cattle power. It is said that India has about 67 cattle per 100 cultivated acres, compared with 38 and 25 in Egypt.

The cattle in India are overworked and ill-fed owing to paucity of fodder supply. The cattle generally graze in the open fields and pastures and there is practically no organised attempt to grow and stock fodder. In order to assure fodder supplies in India, it is necessary to develop the cultivation of fodder on modern scientific lines.

Until recently cattle breeding grew up in a haphazard manner with serious deterioration in quality of cattle. The Central and Provincial Governments have now taken up this problem of cattle breeding in India in their own cattle farms. Breeding work is being done in order to improve the milk yield of cattle by selective breeding and crossing indigenous breeds with sires of European pedigree. The Veterinary Department has been practising the elimination of bulls by compulsory castration in order to improve the quality of cattle. Co-operative breeding societies have been started in some areas. Scientific cattle breeding received attention from 1937.

There is annually a heavy loss of cattle due to diseases. Although the Veterinary Department is gradually extending its services, the veterinary aid in India is very insufficient and should be more vigorously developed. The Muktesar Institute is conducting veterinary research work.

The following tables illustrate the distribution of cattle between India and Pakistan.

TABLE I

CATTLE (In lakhs)

Indian Union:		*Pakistan:*	
Oxen	1,437	Oxen	226
Buffaloes	413	Buffaloes	52

GOATS AND SHEEP (In lakhs)

Indian Union:		*Pakistan:*	
Goats	529·3	Goats	90·2
Sheep	441·0	Sheep	67·9

TABLE II

PRODUCTION OF HIDES (In lakhs pieces)

Indian Union:		*Pakistan:*	
Kips (cow, bullock, bull hides and calf skins)	165·6	Kips (cow, bullock, bull hides and calf skins)	34·5
Buffalo hides ...	51·0	Sheep skins ...	149·5

PRODUCTION OF SKINS (In lakhs pieces)

Indian Union:		*Pakistan:*	
Goat skins ...	228·5	Goat skins*	46·4
Sheep skins ...	149·5	Sheep skins	21·3

The following statistics of exports of hides and skins are given:—

Raw Hides and Skins—

	1945-46	1946-47	1947-48
Quantity (in Tons)	12,939	25,301	23,272
Value (in Rs.) ...	5,00,31,115	8,49,35,052	7,47,48,078

Tanned or Dressed Hides and Skins—

	1945-46	1946-47	1947-48
Quantity (in Tons)	10,568	24,511	19,014
Value (in Rs.) ...	6,34,87,718	17,97,06,585	13,74,57,609

Marketing of Agricultural Produce in India :—It is well known that the Indian cultivator is very much handicapped in marketing his products and in consequence he generally does not receive a fair price for his goods. There intervenes a large body of middlemen between the primary producer and the final consumer and in practice a major part of the price paid by

consumers usually goes to the pockets of these middlemen. The following diagram submitted to the Royal Commission on Agriculture by the Indian Central Cotton Committee illustrates clearly the fact of the existence of middlemen in agricultural market.

Grower

Village dealer		Village dealer
Market (through broker)		Travelling buyer
Middleman (one or more) (ginning here)	Exporter or mill buyer or merchant's agent (ginning here)	Middleman (one or more) (ginning here)
Commission agent (one or more)		Commission agent
Exporter or mill buyer or merchant	Exporter or mill buyer or merchant	Exporter or mill buyer or merchant

Being a person with meagre resources, the Indian cultivator is no match against the resourceful distributors and consumers of his products. In addition, he is handicapped by lack of knowledge and combination among his associates, absence of proper weights, measures and regulated markets and practices of unauthorised deductions from regular weights. There is no storage facility nor any system of market information. The lack of standardisation, sample and packing goes against the cultivators.

Normally a cultivator sells his produce to a middleman in advance of his crop and is very often compelled to sell his produce when everyone else is selling, because he is hard pressed for funds. He frequently hypothecates his produce to the money-lender, who contracts to buy at a very low price.

Co-operative Sale Societies :—It has been urged and with cogent reasons that the organisation of co-operative sale societies is the most suitable weapon to eliminate the middlemen and if these are supplemented by consumers' co-operatives both the cultivators and consumers are assured of a square deal.

Although co-operative marketing has been introduced in India, it has only touched the fringe of the problem. Co-operative cotton sale societies have been started in Bombay, Central Provinces, Madras and East and West Punjab. In Bombay, they

have made considerable headway and have succeeded in improving the quality of cotton grown and securing a better price for cultivators. In 1939-40 there were 36 cotton sale societies in Bombay. These societies in practical working felt the difficulties of proper technical personnel, storage arrangements, correct market intelligence, financing, etc. The principle of co-operative marketing has been extended to other agricultural products like gur, tobacco, paddy, potatoes, etc. The experiment of co-operative sale of paddy and jute in East and West Bengal did not succeed. In Madras, the system has made a limited progress. United Provinces have successfully organised co-operative marketing of sugar-cane, ghee, potatoes, cereals and fruits. Bihar has been fast developing co-operatives in the marketing of sugar-cane. It is gratifying to observe that the movement of co-operative marketing is gaining momentum under auspices of the Central and Provincial marketing organisations.

Other Improvements in Marketing of Agricultural Products :—The Cotton Transport Act of 1923 (applicable to Bombay, Madras, Baroda, Rajpipla and Indore) enables the Provincial Government to notify definite areas of cotton for protection and to prevent the importation of cotton from outside except under a license. This is intended to prevent adulteration. The Cotton Ginning and Pressing Factories Act of 1925 empowers the provincial Governnment to control ginning and pressing factories and enforce marking of all bales of cotton pressed with a press-mark. The Bombay Agricultural Produce Markets Act also aims at regulating samples of agricultural products. Bombay, Madras, Hyderabad, Central Provinces, East and West Punjab and Mysore have passed legislation providing for regulated markets, which safeguard cultivators against undue deductions, false weights, low quotations, etc.

The Agricultural Marketing Organisation in India :—The Royal Commission on Indian Agriculture stressed the necessity of improving marketing conditions as an effective means of enhancing rural and agricultural prosperity. The Commission emphasised the undertaking of marketing surveys under suitable technical personnel. The Centre and Provinces were urged to appoint Marketing officers for the purpose. Accordingly the Government of India appointed a Marketing Adviser to the Imperial Council

of Agricultural Research in 1934. The Central Marketing Adviser now acts through various marketing officers acting under him. Provinces have also appointed their own marketing officers under a Chief Marketing Officer.

The central marketing staff works in collaboration with provincial marketing staffs to conduct investigation, development work and grade standards. The investigation work includes marketing surveys with a view to give an over-all picture of an agricultural product in reference to inter-provincial, inter-State and foreign trade and indicate future line of progress. The development works are aimed at bringing a closer liaison among the producer, trade and consumer. The marketing organisation also aims at popularising the standard grades, containers, etc.

The Agricultural Produce (Grading and Marketing) Act was passed in 1937, which provided for defining standards of quality and specifying grade designation marks. The Act empowers the Agricultural Marketing Adviser to issue certificates of authorisation to suitable persons who are prepared to grade and mark their produce and the Central marketing staff has initiated the grading and marking of different commodities at various centres throughout the country. The success of this grading system is illustrated by the fact that the sale of commodities under the Agmark is showing progressive increase.

In order to improve the marketing intelligence service, arrangements have been made to broadcast prices, stocks, movements of goods, etc. from the All-India Radio.

The recent Conference of Marketing Officers made the following important recommendations to the Government of India to protect the interests of farmers and facilitate trading.

Pending recommendations of the Indian Standards Institution concerning the general reorientation of the Government policy on weights and measures, provincial and State Governments should: (1) Undertake necessary legislation, if it does not already exist, for enforcing standard weights and measures; (2) create the necessary machinery to enforce standard weights and measures in all parts of the province or State within as short a period as possible not exceeding five years; (3) restrict the use of capacity and volume measures for trading only in liquids and semi-liquids; (4) permit the use of only the Indian system of weights i.e. standard maund, seer, chattak etc., for trading in internal markets and to restrict

the use of avoirdupois weights for trading in port towns only in commodities entering the export trade; (5) lay down that all prices shall be quoted on the basis of prescribed units of weights or measures; and (6) entrust the administration of the Weights and Measures Act to the Provincial and State Marketing Officers, where this has not been already done.

The Government of India should expedite the work of the Indian Standards Institution concerned with the prescription of standards of weights and measures and to arrange for their effective adoption on an all-India basis.

Standard Contracts:—With a view to securing improvement in quality of agricultural produce, eliminating trade disputes and smoothening the operation of trade between distant markets steps be taken (1) to prescribe standard contracts on an all-India basis for important staple commodities; (2) to convene a conference of important trade associations interested in agricultural produce for considering the possibilities of a general adoption of standard contract terms by the trade associations on a voluntary basis, and discussing difficulties, if any, in enforcing all-India standard contracts in any particular region or regions; (3) to enforce the use of standard contract terms by legislation, if it is not found feasible to secure a general acceptance of all-India standard contracts on a voluntary basis; and (4) to secure the adoption of Indian standard contract terms for the export trade.

Rail-road Transport :—On the subject of rail and road transport the conference recommended that the provincial and State Governments should give the highest possible priority for the construction of all weather-feeder roads in agricultural areas for facilitating the movement of agricultural produce to assembling markets or despatching stations, and popularize and assist in the use of pneumatic tyres for bullock carts and to assist in the manufacture and utilization of country carts for transporting agricultural produce.

It also recommended that the rail transport and steamship authorities should introduce a unified rates policy for different classes of goods for the whole country, and provide adequate number of ventilated and insulated wagons and refrigerated transport for perishable products like fruits, vegetables, eggs, fish milk and butter.

Co-operative Marketing :—To secure the cultivator a better return for his produce and save undue profits made by middlemen, Governments in provinces and States should encourage organization of producers' co-operative societies for the pooling, grading, processing, if necessary, and marketing of their produce and the organization of consumers' co-operative stores and to link them up with producers' marketing societies.

Weights and Measures :—The Central Provinces Weights and Measures of Capacities Act of 1928 defines the units of weights and measures. It also empowers the provincial Government to obtain standardisation by notifying areas for the purpose of the Act. A similar Act was passed in Bombay in 1935. Although the Standards of Weight Bill was passed by the Central Legislature in 1939, provinces have not yet given effect to it.

The standardisation of uniform contract terms have been devised for several commodities throughout India.

Provision of Warehouse facilities :—The importance of providing warehouse facilities has been emphasised by the Central Banking Enquiry Committee, Royal Commission on Indian Agriculture and others. Indian cultivators are handicapped by the absence of suitable godowns and warehouses. A beginning has been made in this direction by the co-operative societies. Bombay and Madras Governments have been encouraging the erection of such godowns and warehouses by granting loans and advances to multi-purpose societies and marketing societies. Arrangements should be made to enable the cultivators to take loans from credit institutions on the security of certificates to be issued by the warehousing authorities against commodities deposited.

CHAPTER XII

THE STATE IN RELATION TO AGRICULTURE

Agricultural Department :—The idea of setting up a Government Department of Agriculture was first mooted in connection with the Orissa Famine of 1866 and it materialised in 1884 on the recommendations of the Famine Commission of 1880. Agricultural Departments were started in various provinces. An agricultural chemist was appointed to the Government of India in 1892 and the Department benefited largely from the donations of H. Phips and Sir David Sasson. An Inspector-General of Agriculture was appointed in 1901 to advise Central and Provincial Departments. This post was replaced by the Director of the Agricultural Research Institute at Pusa, who was also the Agricultural Adviser to the Government of India until 1929. The Pusa Institute was established in 1903. An Agricultural College was set up in Poona in 1908.

An All-India Board of Agriculture was set up in 1905 in order to co-ordinate the activities of the Provincial Departments. After the Reforms of 1919, Agriculture became a provincial subject and it is now under the charge of a provincial Minister. The Agricultural (then Imperial) Department to the Government of India is concerned with matters of all-India importance and runs the following institutions, namely, the Agricultural Research Institute now at Delhi (originally at Pusa), Institute of Veterinary Research (Imperial) at Muktesar, Institutes (Imperial) of Animal Husbandry and Dairying at Bangalore and Willingdon, the (Imperial) Cattle-breeding Farm at Karnal, the Creamery at Anand, The (Imperial) Cane-breeding Station at Coimbatore and the Sugar Technological Institute at Cawnpore. The (Imperial) Indian Council of Agricultural Research was set up in 1929, eliminating the post of Agricultural Adviser. It now edits a few agricultural journals in addition to other important works. The Agricultural Marketing Adviser to the Government of India was appointed in 1934.

In addition several Agricultural and other Associations have developed to collaborate with the Agricultural Department in matters of agricultural improvements all-round.

The Provincial Agricultural Departments concentrate on researches and experiments in agricultural farms and in laboratories and undertake to organise propaganda to adopt improved methods and implements, secure better seeds, use manures, mainly, artificial and practise scientific rotation of crops. They are substantially assisted by the Indian Council of Agricultural Research, which aims at co-ordinating and guiding the various Provincial Departments.

The Agricultural Departments have achieved notable success in improving crop yields, but the progress is as yet limited. The Central Cotton Committee and the Central Jute Committee have improved both the acreage and yield of cotton and jute respectively.

Agricultural Education :—Agricultural Colleges have been established at Poona, Coimbatore, Nagpur, Cawnpore and Lyallpur. They teach up to graduate courses as well as train for diplomas or certificates and the latter training is aimed at making a career in practical agriculture. Post-graduate training in agriculture is provided for at the Central (Imperial) Agricultural Research Institute, New Delhi. Agricultural vocational middle schools have been started especially in Bombay to train sons of farmers. Although practical training in agriculture is not yet given in primary schools, Bombay, United Provinces and West and East Punjab have attempted to incorporate a rural bias in their schools in rural areas. East and West Punjab have started to teach practical agriculture in vernacular middle schools and this appears to be a healthy system of imparting agricultural education by including agriculture among the general curriculum of rural schools. Almost all Universities have now introduced Agricultural Economics and Agriculture in their courses of studies. The reorientation of rural education on the lines of the Wardha Scheme is engaging the serious attention of the Government and is likely to be of great importance from the point of view of agricultural education.

Rural Reconstruction :—It has been realised that all attempts to improve the rural conditions in India will only meet with a limited success, unless the rural population are encouraged to go in for a higher standard of living. In order to revitalise the rural folk, various agencies both official and non-official have been

set up. The movement for village uplift and rural reconstruction received a new fillip after the Central Government earmarked a grant of Rs. 1 crore to provinces for this purpose in 1934-35. Since then provinces have undertaken this all important task of rural reconstruction by establishing Village Uplift Boards, Rural Boards, Rural Development Commissioners, etc. The Gurgaon experiment in Punjab was directed towards improving villages through the medium of a selected leader for a particular village. Despite its shortcomings, the experiment attained notable success. The rural uplift schemes of nearly all provinces include among others the encouragement of village industries, improvement of village communications, rural sanitation, recreation, health, medical aid and agricultural technique.

Royal Commission on Indian Agriculture :—The Royal Commission on Indian Agriculture was appointed in 1926 to study agricultural conditions and rural economy of India and suggest reforms. It submitted its report in 1928 and recommended reforms of far-reaching character. These recommendations form the basis of rural reconstruction and agricultural advance in broad outlines and steps are being gradually taken to implement them in practice.

The Indian Council of Agricultural Research :—The Imperial Council of Agricultural Research was instituted in 1929 on the recommendations of the Royal Commission on Indian Agriculture in 1929.

The Imperial Council was divided into two wings. One was the Governing Body and the other the Advisory Body. The former was meant to manage the affairs and funds of the Council and the latter to examine all proposals in connection with the scientific objects of the Council which might be submitted to the Governing Body. An initial grant of Rs. 25 lakhs, supplemented by an annual grant of Rs. 7·25 lakhs, was provided from the funds of the Central Government. Donations too have been made by some Indian States from time to time. A few years ago, a cess of ½ per cent *ad valorem* on certain agricultural commodities was levied with a view to securing a larger stable income for the Council under the Agricultural Produce Cess Act of 1940. Its headquarter was shifted a few years ago to Delhi from Pusa. After August, 1947, the Agricultural Council was renamed as

Indian Council of Agricultural Research. It has been decided to plan agriculture and animal husbandry on a regional basis. According to this decision, research schemes hereafter will be classified as fundamental, regional, and local. Fundamental items will be allotted as far as possible to the Central Institutes, Universities, and other stations such as the Central Commodity Research Station; regional problems are to be financed on a contributory basis by the I.C.A.R. and the Province best suited to take up a particular item of research; and local problems are to be assigned to the respective Provincial Departments. The regions are five in number, namely Wheat, Rice, Malabar, Millet and Himalayan. On the Animal Husbandry side, the four regions to be set up are Dry, Wet, Medium rainfall, and Himalayan. There will also be local Committees to deal with the presence in each region of small pockets which will not be representative of the general conditions prevailing in that region. Among other decisions reached at the meeting of the Governing Body mentioned above was a comprehensive plan of crop cutting survey to estimate crop yields. This method of random sampling replaces estimation by guess-work and, therefore, its implementation is a remarkable step forward in the direction of collecting agricultural data. Its adoption had been recommended alike by the Gregory Committee and by the Bengal Famine Inquiry Commission. Complete lack of contact between the laboratory and the field has been mainly responsible for the comparatively poor per acre-yield in India. All the results of research which the I.C.A.R. has accumulated ever since Dr. Voelcker visited this country must have grown by now unmanageably voluminous. The fact that the results have not reached the cultivator in an assimilable form in full measure during the past four and a half decades does not redound to the credit of the I.C.A.R. Now that it has decided to set up an Information Bureau in the Ministry of Agriculture to collect and disseminate information of results of research, it is to be hoped that the I.C.A.R. will be able to remove completely the snag in the relationship between the research assistant and the cultivator. The Bureau should make full use of all the known media, namely, the film, the radio, the stage, the Press and the exhibition in disseminating information.

The duty of this body is to give a lead and co-ordinate the work of Agricultural Departments, but not to interfere with

departmental affairs. It is to promote, guide and co-ordinate agricultural research throughout India. Agricultural research programmes are submitted to this body for approval. It acts as a clearing-house of information regarding agricultural and veterinary matters. It tries to link research work in India with that in other parts of the world.

Among other things it is tackling research problems connected with rice, wheat, cotton, jute, sugar technology, cane-breeding, agricultural marketing, dairy-farming, fruit-growing, locust and pest, animal husbandry, manures, etc. The Council also encourages agricultural researches in various Universities by extending financial grants.

It may be mentioned here that an enquiry consisting of Sir John Russel and Dr. N. C. Wright was made into the working of the Council in 1936-37 and they made suggestions for improving the working of the Council on various aspects, covering Indian agriculture.

It has been estimated that about Rs. 56 lakhs are spent annually for the Food Ministry, Rs. 180 lakhs on Central Agricultural Departments and Rs. 6·5 lakhs on the Indian Council of Agricultural Research. The Provincial Agricultural Departments involve an annual expenditure exceeding Rs. 11 crores.

Grow-More-Food Programme :—The last world war changed fundamentally the pattern of Indian economy in relation to both agriculture and industry. During the post-war period it has been found that India's population has been increasing faster than the production of food. Cultivation has also been shifted from food crops to cash crops, owing to more remunerative prices of the latter. This resulted in total net deficit of India's food requirements. This problem of food shortage has been tackled by both short-term and long-term measures. Among the short-term remedies, controlled distribution combined with price controls and increased food imports have been widely initiated. In order to make the available food supplies equitably distributed amongst the entire population, the Government has been practising the distribution of food by introducing rationing over wide areas and has also controlled the prices of various commodities to prevent unduly high prices.

In importing food from abroad, the Government has been confronted with serious difficulties. The extent of the huge volume of import is illustrated by the figure of 4 million tons, which have been planned to be imported during 1949-50, and this means a total outlay of over Rs. 130 crore on food import account. On top of this the Government spends exceeding Rs. 32 crores annually for subsidising foreign food imports in order to equate the difference between local and foreign high prices. In bringing this foreign food supplies, the Government has been further confronted with the task of finding foreign exchanges to finance the imports. Owing to the devastation wrought by the war in South-East and Far-East Asiatic countries, the favoured sources of food supplies from Burma, Siam, etc., have been substantially curtailed and in consequence India has been obliged to find its food requirements from dollar areas. India which is already short of dollars in balance of payments has been finding it extremely difficult to obtain the necessary dollars for the purchase of food and the Government has been desperately meeting this serious dollar gap by frequent recourses to dollar loans from the International Monetary Fund, the International Bank for Reconstruction and Development and kindred other sources.

The above remedies are only palliatives and the real and effective solution consists in increasing food production within the country. It has been recognised that India possesses vast potentials in this regard and if these can be scientifically and vigorously harnessed, India will be able to be self-sufficient in matters of food in the not-too-distant future. The Government of India in co-operation with all provincial Governments have in consequence launched in ambitious schemes of increasing food production during the past few years. All these projects have been comprised in what is popularly known as the Grow-More-Food Campaign. It has been estimated that so far a total sum of over Rs. 32 crores have been spent on Grow-More-Food schemes throughout India. Although it is estimated that these measures have resulted in an increase of food of nearly a lakh tons, the progress achieved falls far short of programmes and expenditure entailed.

In its anxiety to make the country self-sufficient in food within the next few years, the Government of India have evolved

an ambitious scheme of agricultural improvement in collaboration with provinces and states.

The main features of the scheme are: Reclamation of 6m acres of culturable land over the next seven years; sinking of 4,500 deep tube-wells to irrigate 3m acres of land; supply of chemical fertilizers; supplementing local resources of organic manure; and increase of fish supply from marine resources by establishing five well-equipped marine fishing stations which can undertake deep sea fishing.

The cost of the scheme is estimated at Rs. 271 crores, of which the rupee expenditure will be Rs. 146 crores. The balance of about Rs. 125 crores will have to be found in sterling and dollars.

Land Reclamation:—The total area of culturable waste land in India is about 65m acres. The Foodgrains Policy Committee had recommended that about 9m acres of such land should be reclaimed. In view of the shortage of men and materials, on the one hand, and the need for achieving quick and permanent results on the other, the Central scheme proposes to concentrate for the present, on the reclamation of 6m acres. Of these, 2·2m acres will be new land and 4m acres will be weed or kans-infested land which has gone out of cultivation. Cultivation of new land will be distributed as follows: East Punjab 500,000 acres; East Punjab States 400,000 acres; Orissa 500,000 acres; the C. P. and Berar 300,000 acres; and the U.P. 300,000 acres. In Bihar also some new land would be put under cultivation, but the area is not yet known. Reclamation of kans-infested land will be taken up as follows: the C. P. and Berar 600,000 acres; Madhya Bharat 1,400,000 acres; Bombay, Bhopal, the U. P. and Vindhya Pradesh 500,000 acres each.

The estimated additional yield of food crops from the land thus reclaimed will be about 2m tons. Already the Central Tractor Organization of the Government of India has reclaimed 32,000 acres of cultivable land in the U.P. and the C. P. and this year, the organization hopes to reclaim 110,000 acres in different provinces.

Tube-well Construction:—Sample experiments conducted in East Punjab, the U. P. and Bihar have indicated sub-soil water which can be utilized for irrigation. Although in some of these areas there are canals a large portion of the territory will have

to depend on sub-soil reservoir if any intensive cultivation programme is to be undertaken. These provinces propose to construct 4,565 tube-wells during the next three years beginning 1949-50 and the necessary help by way of equipment, technical staff and finance has to be arranged by the Government of India, so that at least 1,000 tube-wells could be constructed every year for the next two or three years.

In other provinces, the existence of ground water in adequate quantities and at economic depths has yet to be proved for which extensive exploratory borings will be needed before large tube-well schemes could be formulated.

Practically, all the tube-wells in use for irrigation purposes in upper India were constructed by the old hand boring methods. These methods are slow, taking sometimes several months to complete a well. They are also ineffective in hard clay and rock strata and for deep boring. To expedite the construction programme it is considered essential to introduce in India the use of up-to-date mechanical boring apparatus such as is used in the U.S.A. and other advanced countries.

Fishing Stations :—The scheme proposes to set up a chain of well-equipped pilot fishing stations along both the coasts of India. To begin with, it is proposed to start such stations at Bombay, Cochin, Vizagapatam, Chandbali and Calcutta (or some suitable place near the mouth of the Hooghly). Each station will have a cold storage plant with a capacity of 500 tons and refrigerator motor vans for carrying fish to inland markets by road.

The scheme also provides for supply of chemical fertilizers. The Government of India has already established a pool from which fertilizers allocated by the International Emergency Food Council, or produced locally, are distributed to provinces according to their requirements. The nitrogenous requirements of the Indian soil are, however, much more than what farm-yard manure can produce and the need for import from abroad is essential.

It may be observed that in order to meet the dollar part of the total expenditure, the Government of India has already approached the International Bank for Reconstruction and Development for a loan. The Bank's delegation has already investigated into India's claim for a loan by paying a visit to this country and it is anticipated that India's application for the loan is likely to be favourably considered.

Artificial Rain for Scarcity Areas :—India's agriculture may no longer be dependent on the vagaries of the monsoon. The Meteorological Department of the Government of India is considering a scheme to bring about artificial rain in areas where there is a scarcity. The scheme is to spray from aircraft pellets of solid carbon dioxide into clouds above freezing level. About 100 lbs. of carbon dioxide can give $\frac{1}{8}''$ rain over an area of about 10 square miles, depending on the thickness and extent of the soil layer. Even so small an amount of rain is said to be sufficient to keep crops from withering.

The price of 100 lbs. of carbon dioxide is not more than Rs. 120 but the experiment becomes costly if civil air-craft are to be used only for this purpose. To reduce the cost of artificial showers the Department has suggested using the airport for the experiment as is being done in Australia, Canada and some other foreign countries. Such experiments involve flying in high altitude up to 25,000 ft. While engaged in reconnaissance flights, RIAF pilots can by this method cause rainfall over areas where it is urgently needed. The RIAF has already been contacted and is willing to co-operate with the scheme.

Agricultural Census Planned :—The Government of India have appointed a technical committee to organize an agricultural census in 1950. The committee will examine the forms of returns at present used by the different provinces and States for routine collection of data, evolve standard forms of returns and consider whether any special modifications are necessary in the scope of enquiry in repect of areas where the system of land survey or record of rights is not introduced.

The committee will also explore the directions in which the data collected in the census can be usefully integrated with data collected in the population census.

Pakistan :—The Government of Pakistan is also pursuing vigorous schemes to develop agriculture. It proposes to establish Meteorological Headquarters at Chittagong, where experiments of collective farming will also be tried.

The Pakistani Government has arranged to import tractors from Canada for Government farms.

The Agricultural farm at Dacca has been doing useful research work on agriculture and it is understood that the Dacca

laboratory has been able to discover a remedy for the eradication of water hyacinth.

The Government is considering a proposal to invite FAO experts to advise them on certain problems relating to food and agriculture, and another proposal to import heavy machinery for soil conservation and land reclamation. The Director-General of the FAO had suggested that the possibilities of agricultural deveopment in Pakistan were considerable, and that Pakistan could profitably seek the advice of the technical staff of the FAO and help from the Organisation for obtaining heavy machinery for soil conservation and land reclamation. There is no dearth of agricultural labour in the country-side, but large-scale farming and tenancy reforms are on the anvil in the NWFP and Sind is providing an impetus to mechanised agriculture.

The first meeting of the Food and Agricultural Committee, the opening session of which was addressed by the Food Minister, considered the possibility of organising sugar-cane research, and starting a Central Research Station, so that production of sugar could be increased substantially to make Pakistan self-sufficient in this commodity as far as possible. The Food Minister said that recent reports indicated a reduced recovery of sugar from the crop in certain areas. Pakistan produces only 30,000 tons of sugar, against total annual requirements of 230,000 tons.

He also asked the Committee to consider in detail plans to cultivate tobacco for the cigarette industry, and to increase production of oilseeds. Cultivation of copra and of groundnut for the vanaspati industry, and development of fruit cultivation so far seriously handicapped by pests and diseases, also engaged the Committee's attention.

A committee was formed to consider finance for existing agricultural schemes, new schemes for improved maize in West Punjab, investigation of veterinary diseases in Sind and gram diseases in West Punjab, combined schemes for wheat and barley rusts, and potato seed production and cultivation. It will also examine plans to develop sugar cultivation in the North-West Frontier Province, and consider research schemes for tobacco in that Province and the West Punjab.

With prospects of increasing power supply the Thal Development Authority, an ambitious and far-reaching land development

project designed on the lines of the Tennessee Valley Authority, is engaging the attention of the West Punjab Government. The project, estimated to cost about Rs. 15,50,00,000, aims to turn about 18,00,000 acres of fallow land in the Thal area into an additional granary for West Punjab and Pakistan. About 15,50,000 acres in the area are now owned by private individuals, which the Government intend to acquire to make the colonisation schemes a success.

There is a plan for building modern villages and modern farms; and to provide tractors, harvesters, thrashers, elevators and other modern agricultural machinery on a hire-purchase system. The project, when it fructifies, will relieve congestion and pressure on land in the Multan, Montgomery and Lyallpur Districts. The N.W.F.P. will supply power from Jabban, Dargai and Warsak. Large tracts in the tribal areas will come under irrigation for the first time, and power will be available for running trains. Rupees two crores and twenty-two lakhs are to be spent this year on the Thal Project.

The total area under cotton crop in 1948-49 is 2,853,000 acres against 3,146,000 acres in the previous year.

CHAPTER XIII

THE CO-OPERATIVE MOVEMENT IN INDIA

Significance of Co-operation :—Co-operation in a technical sense implies the association of individuals in various pursuits of life to increase everybody's moral and material prosperity. Co-operation also implies absence of any profit-motive. In practice, co-operation has been introduced to cover various aspects of economic life, namely, production, distribution and consumption. It has also been extended to spheres of health, welfare sanitation, etc.

History of the Co-operative Movement in India :—Frederick Nicholson, a Madras Civilian first suggested in 1895-97 to the Madras Government to introduce co-operation to solve the problem of rural credit. He compared the Nidhis of Madras with Friendly and Building Societies of Great Britain and recommended emphatically to "Fnd Raiffeisen", the pioneer of the co-operative movement elsewhere. His suggestion was reinforced by the publication of a book entitled The People's Banks of India by Dupernex of the United Provinces Civil Service. Pioneer co-operative societies were started on private initiative by Government officials in certain areas of Bengal, Punjab and United Provinces. Lord Curzon's Government appointed a committee under Sir Edward Law to investigate into the possibilities of Co-operation in India. The committee in consultation with Henry Wolff recommended the introduction of the co-operative movement in India and accordingly the Co-operative Credit Societies Act of 1904 was passed.

The Co-operative Credit Societies Act of 1904 :—The Act introduced only credit co-operation. Any ten adult persons belonging to the same village, town, tribe or caste were entitled to form themselves into a co-operative credit society and have it registered. A distinction was made between rural and urban societies according as four-fifths of the members belonged to a village or town. In case of rural societies, unlimited liability was the rule, while this matter was left to the voluntary will of the

urban societies. A rural society was obliged to carry all profits to reserve fund, unless otherwise directed by provincial Government concerned, while only one-fourth of profits of a urban society was meant for the reserve fund. Certain limits were placed on share capital. No member was allowed to hold more than one-fifth of shares, the total value of an individual's share holding not exceeding Rs. 1000 and to have more than one vote. Registrars were to be appointed in provinces to supervise the movement. Reserved powers were given to Governments regarding compulsory audit and inspection, compulsory dissolution of a society and rule making.

Progress from 1904 to 1912:—Although the co-operative movement made phenomenal progress by 1912 as illustrated from the following table, certain defects of 1904 Act were felt. The need for other forms of co-operation was keenly felt. In order to attract the necessary capital for primary credit societies, central agencies like unions and central banks were required. The distinction between urban and rural societies was felt to be artificial. In order to remedy these defects the Co-operative Societies Act of 1912 was passed.

Year	Number of societies	Number of members of primary societies	Amount of working capital Rs.
1906-7	843	90,844	23,71,683
1907-8	1,357	149,160	44,14,086
1908-9	1,963	180,338	82,32,225
1909-10	3,428	224,397	1,24,68,312
1910-11	5,321	305,058	2,03,05,800
1911-12	8,177	403,318	3,35,74,162

The Co-operative Societies Act of 1912:—Almost all kinds of co-operation were formally recognised by this enactment. Three kinds of central societies were also recognised, namely, Unions, consisting of primary societies, Central Banks composed of partly individuals and partly societies and Provincial Banks, consisting of individuals.

The Act enabled the unlimited societies to declare dividends and all societies were allowed to spend not exceeding 10 per cent of profits on charity and education after carrying at least one-fourth of profits to reserves. The old distinction between urban and rural societies was superseded by a new distinction between societies with limited and unlimited liabilities. The Act laid down that the liability of a society whose members are registered societies shall be limited, while that of a society, extending credit to members, who are mostly agricultural, shall be unlimited leaving the rest to be either limited or unlimited liability societies at option.

Progress of the Co-operative Movement since 1912 :— Though the co-operative movement made great strides since 1912, attempts have been made since the thirties of the present century to consolidate the progress gained rather than to expand it, because it was found that the movement went far ahead of anticipation and was involved in difficulties and complications. The following table illustrates the progress of co-operation in several directions, namely, societies grew up for the sale of produce, cattle insurance, yarn, silk and fertiliser purchase, milk supply, purchase of consumer's goods etc.

	Number of societies in thousands	Number of members in lakhs	Working capital in Rs. crores
Average for 5 years from 1910 to 1914-15	12	5·5	5·48
Average for 5 years from 1915 to 1919-20	28	11·3	15·18
Average for 5 years from 1920 to 1924-25	58	21·5	36·36
Average for 5 years from 1924 to 1929-30	94	36·9	74·89
Average for 5 years from 1930 to 1934-35	1,06	43·2	94·61
1937-38	1,11	48·5	103·02
1938-39	1,22	53·7	106·56
1939-40	1,37	60·8	107·10

In order to review the progress made and suggest improvements the Maclagan Committee was appointed in 1914 and

submitted its report in 1915. It recommended important reforms of far-reaching character. Co-operation was made a transferred subject under a Minister in 1919 reforms. In order to meet local peculiarities, Bombay passed its own Co-operative Societies Act in 1925 and this example was subsequently followed by Madras in 1932, Bihar and Orissa 1935, Coorg 1937 and Bengal 1941.

The opening of the Agricultural Credit Department by the Reserve Bank of India marks another landmark in the history of the movement in India. The co-operative movement has been given additional fillip by the campaign for village uplift undertaken by several provinces, who have also appointed special officers to investigate into the co-operative movement with a view to furthering progress on sound lines.

Kinds of Co-operative Societies:—The table below illustrates the predominance of credit societies, but lately other forms of co-operation are taking roots. Recently the co-operative movement is being utilised to develop India's cottage and rural industries. Consumers' co-operative are being tried with success to tackle the problems of distribution in prevailing shortage of goods all-round.

Primary Agricultural Credit Societies:—The minimum size of an above society is ten and maximum 100. It is normally confined to a single village. Multi-purpose societies in Bombay and madras are organised on the basis of a group of villages. Unlimited liability is the rule, unless otherwise permitted by the Government. The Madras Committee on co-operation advocated limited liability in 1939-40. It is democratically managed by a General Committee composed of all members, who elect a Managing Committee to look after day-to-day work. Services are rendered honorary.

The working capital is derived from entrance fees, deposits and share capital of members and reserve funds. Bombay has introduced the system of instalment share system. As members are usually with limited resources, deposits have contributed only a small part towards working capital, which is largely drawn from outside. Loans and deposits are accepted from other societies, Government and secondary or central financing agencies like central and provincial co-operative banks.

The following table illustrates the position of working capital on All-India basis during 1942-43.

	(Rs. 1,000)
Share Capital (Paid up)	15,70,79
Loans and Deposits held at the end of the year from—	
Members	12,22,11
Societies	7,68,36
Provincial and Central Banks	22,86,50
Government	1,74,33
Non-members and other sources	33,94,09
Borrowing of Land Mortgage Banks and Societies	7,05,91
Reserve Fund	13,33,02
Other Funds	6,59,21
Total ...	1,21,14,32

Loans are essentially given for productive purposes. Limited amounts are loaned for unproductive uses and the redemption of old debts. Care should be taken to see that long-term loans are strictly limited, because they are likely to lead to disastrous consequences as we find in the case of several credit societies, specially in West Bengal and Eastern Pakistan.

Although the repayment is spread over convenient instalments, discretion should be exercised in selecting borrowers and assessing the extent of loans. The repayment should be strictly enforced, because overdues and freezing of assets have spelt disaster as far as the movement is concerned in Berar, Orissa, West Bengal and Eastern Pakistan.

Normally co-operative societies should depend upon personal security and honesty of members. In practice, sureties normally from among members are demanded and collateral securities of movable and immovable properties are wanted.

Where there is no share capital, entire profits go to the reserve fund after spending about 10 per cent on charity and education. Dividends, if there be any, on share capital are strictly limited, as the co-operative movement should be pruned of a profit motive.

Arrangements for arbitration exist in Bombay and elsewhere for disputes between members and the society and such arbitration systems should be compulsorily introduced.

Non-Agricultural Credit Societies :—Schulze-Delitsch types of non-agricultural credit societies have been encouraged throughout India to cater to the needs of the population other than agricultural. Popular among them are People's banks, Thrift and Life Insurance Societies, Societies for the employers of large firms and of Government Departments, Communal Societies, Artisans' Societies, Societies for Factory Workers and Societies for the Depressed Classes.

Non-Credit Co-operative Societies :—Non-credit societies may be either agricultural or non-agricultural. They may be of various types, namely, societies for the purchase of raw materials and implements, sale of produce, production, distribution or consumption, insurance, construction of houses, etc. The statistics of these societies are given below:—

NON-CREDIT AGRICULTURAL SOCIETIES, 1944-45

Province	Purchase and sale	Production	Production and sale	Other forms of co-operation	Total
Madras	242	...	219	505	966
Bombay	90	19	177	238	524
Sind	1	...	6	1	8
Bengal (E. & W.) ...	226	1,008	897	1,575	3,706
Bihar	57	...	3,052	...	4,109
Orissa	18	...	20	...	38
United Provinces ...	13	463	1,974	4,470	6,920
Punjab (E. & W.) ...	17	747	2,851	297	3,912
Central Provinces and Berar	81	18	3	...	102
Mysore	75	...	31	33	139
Baroda	91	19	64	35	209
Hyderabad ...	...	...	...	5	5
TOTAL ...	1,044	2,335	9,509	7,690	20,578

Single and Multi-Purpose Societies :—It has been found that owing to lack of necessary personnel, it becomes difficult to organise different societies for several purposes in an Indian village and the recent trend of opinion favours the growth of multi-purpose societies, which should be encouraged to supplement the existing credit societies. The principal aim of the agricultural credit societies is to provide cultivators with cheap and

restricted credit and to encourage thrift. This has been found difficult to attain unless these credit societies undertake other functions to cater to all kinds of requirements of cultivators. Bombay started in consequence multi-purpose societies with limited liability and these grew up to 65 by 1940. The United Provinces established more than 1,000 villages banks, which are multi-purpose societies for all purposes. The Madras Committee on Co-operation recommended the reorganisation of credit societies on multi-purpose basis in 1939 and certain such societies have already been instituted. The Agricultural Credit Department of the Reserve Bank of India suggested the formation of Banking Unions covering a wide area to strengthen the multi-purpose societies, which could be affiliated to the Union. The Union could interest itself in the manifold activities of such societies. In spite of the desirability of introducing multi-purpose societies, care should be taken to guard against certain dangers. The multiplicity of functions with financial responsibility may create a danger that the failure in one line may affect the entire society. Extending over a wide area, multi-purpose societies may lack in personal knowledge, which is essential for co-operative principles. It is likely to be difficult to get the right type of men to run a multi-purpose society.

Non-Credit Agricultural Movements :—The need for directing the co-operative movement along other lines than credit has been keenly felt, but the progress is rather slow. Co-operative societies have been organised for obtaining implements, manures, seeds, etc. Some sale societies have been inaugurated, but supply societies have made little headway, as business is usually on a small scale. The principle of co-operative insurance has been extended to cover cattle, farm-houses and haystacks. Cattle-breeding societies are found in East and West Punjab. In order to protect fodder, Bombay has initiated fencing and crop protection societies. Irrigation societies have grown in certain areas, especially, in Madras and East and West Bengal. Some land improvement societies are working in Bombay. East and West Punjab have developed a few consolidation of holding societies. In view of fragmentation and sub-division of holdings, there appears to be good prospect for encouraging joint cultivation on a co-operative basis. Distributive co-operation in agriculture is not likely to advance as the standard of living in rural areas is

deplorably low. Taluka Development Associations numbering about 104 in 1940 are doing village uplift work in Bombay. Better Farming Societies to encourage improved agricultural technique are doing useful work in Bombay, Madras and Punjab. Better Living Societies of East and West Punjab and East and West Bengal are working to propagate the principles of better living.

Non-Credit Non-Agricultural Societies :—Although the non-credit non-agricultural co-operative movement has not made much progress, it is steadily growing.

The importance of cottage industries in India's economy is recognised and the economic condition of people engaged in cottage industries can be substantially improved on a co-operative basis. Artisans require credit as much as cultivators and they are likely to be enormously benefited if co-operation is introduced in their purchases, sales, health, etc. The handloom industry offers vast potentialities for co-operation. Weaving schools have been started in Bombay under the Co-operative Department. District Industrial Co-operative Associations have offered immense facilities to Bombay weavers in marketing their products. Almost all provinces have been encouraging the growth of co-operative marketing of handloom products.

Unskilled workers' societies in Madras undertake road construction, canal irrigation, well digging etc.

The consumers' co-operative movement in urban areas has not achieved anticipated results, due to mismanagement, lack of enthusiasm among members and absence of co-operative principles. Madras is easily the leader in regard to consumers' co-operative stores organisation. Progress elsewhere is haphazard and halting. The development of co-operative stores in urban areas offers perhaps the best solution under present conditions of high prices, shortage of goods and transport bottlenecks. This aspect of the movement is likely to confer incalculable benefits on the middle class people.

The housing problem is acute in both urban and rural areas of India and the co-operative movement is full of potentialities in this regard. Housing societies with state aid may go a long way in meeting this problem of housing. Bombay started these housing societies, which numbered over 102 in 1940, while Madras

had about 124. The success of these societies in the two provinces is a great pointer.

Central Societies :—Central societies may be Unions, Central Banks or Provincial Banks.

A Union is a federation of societies of a given area and are usually of three kinds, namely, Guaranteeing Unions, Supervising Unions and Banking Unions. A Guaranteeing Union guarantees the loan of an affiliated member. These Guaranteeing Unions which were largely started in Bombay failed because their guarantees were nominal and so these Unions were not encouraged.

Supervising Unions have been widely developed in Bombay and Madras. The Bombay Government established Supervision Boards in districts to supervise these Unions. The task of supervision in co-operation has been found difficult in India and as yet no efficient system of supervision has been evolved. At present, supervision is exercised either by the Co-operative Department, the Supervising Unions or by both.

After inspecting the Banking Union at Kodinar in Baroda, the Agricultural Credit Department of the Reserve Bank of India recommended the establishment of such Unions on a wide scale, but this suggestion was not favourably received in co-operative circles, as these Unions were likely to discourage deposits.

The Central Banks are the financing agencies of primary societies, which are affiliated to the former. They lend money to the primary societies and also carry on the normal functions of a bank. They also undertake supervision of primary societies. The area of their operation varies from province to province. Central Banks are either mixed or pure types. In a mixed type, members consist of both societies and individuals. A mixed type has been generally preferred in order to attract outside talents and deposits. A pure federal type composed merely of societies has been fast growing in East and West Bengal and East and West Punjab in the form of Banking Unions. Central Banks including Provincial Banks and Banking Unions numbered about 599 in 1942-43 with a total membership exceeding 215,000. About 9 per cent of their working capital is derived from share capital, 59 per cent from individuals' and societies' deposits, 14 per cent from loans from Provincial Banks and the balance from reserves and other funds.

It has been estimated that about 90 per cent of the funds of these banks are lent either to societies or individuals and as overdues are inevitable, many banks were in consequence confronted with difficulties. A large number of them went into liquidation in East and West Bengal, Bihar, Orissa and Central Provinces and Berar due to reckless financing, bad supervision and lack of banking knowledge and inherently defective organisation of primary societies. Deposits raised for short period were locked up in long-term loans, which were mostly unrecoverable due to lack of resources of debtors. Central banks are more soundly organised in Madras, East and West Punjab and Bombay.

Provincial Co-operative Banks :—With the fast development of central banks, the necessity was felt for an apex bank which could co-ordinate and control the working of central societies, serve to act as a clearing house to balance excesses and deficiencies of their working capital and act as a financial centre for an entire province. Accordingly a Provincial Co-operative Bank has been established in all provinces except Orissa. The constitution of a Provincial Bank varies from province to province. In Bengal and Punjab the membership is confined to societies, while in others individuals have been included in order to attract outside talents. The Bombay Bank is perhaps the model in India. Provincial banks normally finance central banks, but in certain areas of Bihar, Orissa, Bombay and Mysore they also finance primary societies. The Provincial banks have provided an extremely useful link between the general money market and jointstock banks in towns and rural primary societies. Provincial banks provide central banks with facilities of cash credit and discounting co-operative paper. It may be observed that the working capital of a provincial bank is derived from own funds to the extent of about 20 per cent, while the balance comes from deposits of individuals, societies, central banks and from Government loans and other sources.

The Maclagan Committee recommended the establishment of an All-India Co-operative Bank to finance provincial co-operative banks. At present there is no need for such an institution as the Reserve Bank of India provides provincial banks with rediscounting and loan facilities. In practice, it is found that provincial banks have ample funds, which are often lent to joint-

stock banks. The Provincial Co-operative Banks Association has also facilitated inter-lending among provincial banks. The working capital, deposits, advances, etc. of Provincial Banks are reproduced below:—

PROVINCIAL BANKS, 1944-45

	In thousands of rupees
Working Capital—	
Share Capital	96,12
Reserve and other funds	1,75,26
Deposits and Loans—	
from Individuals	8,83,01
from Provincial and Central Banks	5,52,17
from Societies	3,21,98
from Government	30,04
Total ...	20,58,58
Loans made during the year to—	
Individuals	6,95,52
Banks and Societies	9,39,20
Total ...	16,34,72
Loans Due by—	
Individuals	1,80,85
Banks and Societies	4,55,79
Total ...	6,36,64

Importance of Land Mortgage Banks in India :—Agriculturists as well as artisans require loans both short-term as well as long period. The Co-operative movement and other prevailing credit agencies are suited to financing short-term and intermediate credits only. There is no suitable agency for long-term financing. In addition, the rural indebtedness cannot

be tackled by either the co-operative movement or any other existing credit agency. It has therefore been found that land mortgage banks are admirable agencies for the purpose of tackling the problems of indebtedness and of long-term finance. The movement for land mortgage banks received special stimulus during recent years due to the fact that creditors are willing to compound outstanding debts if repayment is made forthwith and debts are now being compounded and transferred to land mortgage banks, which are paying off the old creditors.

Land mortgage banks may be co-operative, non-co-operative or quasi-co-operative. In India, most of the banks belong to quasi-co-operative types, which are limited liability associations of borrowers with outside non-borrowing individuals. Loans are granted subject to the sanction of the Registrar of co-operative societies and lands are valued by Government officials. The co-operative or commercial mortgage banks are suited to financing Zamindars.

The history of land mortgage banks in India is traced to as early as 1863, when the Land Mortgage Bank of India Ltd. was registered in London but the bank failed after twenty years of working.

Punjab is really the pioneer in establishing co-operative land mortgage banks in India and it started its first bank at Jhang in 1920. Soon after they were increased to 12, of which two were liquidated. Since then the expansion has been halted and efforts are now being made to consolidate and reorganise the existing institutions. Madras has done better in this direction and had over 119 banks by 1940, while there were 18 in Bombay, 10 in Central Provinces, 5 each in Bengal, United Provinces and Assam. Mysore, Baroda and Cochin have also established such banks.

At the present stage of their growth, land mortgage banks cannot expand without state aid which has been extended in the form of granting repayment of principal and interest, purchasing debentures of these banks, declaring such debentures as Trustee Securities and of granting several other special privileges and concessions. The Reserve Bank of India has been assisting them with help and guidance on sound lines. A landmark was made in the history of land mortgage banking by the

establishment in 1929 of the Central Land Mortgage Bank in Madras for co-ordinating the activities of primary banks affiliated to it and for centralising the debentures, instead of issuing them piecemeal by separate institutions and thereby creating unnecessary competition amongst them. Upto 1942, the debentures of the Central Land Mortgage Bank in circulation amounted to about Rs. 2·43 crores. The Madras Co-operative Land Mortgage Bank Act of 1934 empowered the Provincial Government to guarantee the debentures regarding interest and principal and enabled the Bank to realise arrears more expeditiously. The Registrar supervises the work of the Bank. The Government itself also bought a substantial part of the debentures in addition to granting subsidies to the Bank.

According to the recommendations of the Land Mortgage Committee of 1935, the Bombay Provincial Co-operative Land Mortgage Bank was established in 1935. The Government guarantees the debentures of the Bank in regard to the repayment of capital and interest. These debentures have also been declared Trustee Securities. In addition, the Government has helped the Institution with subsidies. The membership of the Bank is open to individuals, primary banks and co-operative societies. The object of the Bank is to finance the primary banks affiliated to it, supervise and guide the working of the latter.

The land mortgage banks are essentially concerned at present with the redemption of old debts, but it should be remembered that owing to the huge size of such debts, it is not possible for land mortgage banks to tackle this problem in its entirety nor is it desirable for these banks to undertake such a task of enormous magnitude. In order to enable the land mortgage banks to perform their services in rural credit, they should be run on strict business lines. Loans should be discreetly given and arrears should be avoided. These banks ought to encourage more productive loans. They should be linked with other institutions, engaged in uplifting rural conditions. It should be the fundamental aim of all schemes of rural reconstruction to see that easy and cheap credits are made available with due checks and balances. The cultivators must be taught the principles of thrift and to save. Attention paid only to wipe out old debts of a cultivator without training him for a better life will fail to strike at the root of prevailing rural maladies.

The following table illustrates the progress of Land Mortgage Banks in India and Pakistan up to 1944-45:—

Number of Banks or Societies		289
Number of Members		1,38,709
Share Capital	Rs.	51,28,197
Debentures from the Public	„	3,74,59,432
Debentures from Government	„	5,99,517
Deposits	„	17,88,377
Reserve and Other Funds	„	28,62,734
Loans	„	3,01,40,007
Working Capital	Rs.	7,79,78,264
Loans made to Individuals	„	39,68,037
„ „ Banks and Societies ...	„	38,77,304
Profit	„	4,98,539

Commercial Land Mortgage Banks :—The Central Banking Enquiry Committee and the Agricultural Credit Department of the Reserve Bank of India recommended the establishment of commercial jointstock land mortgage banks in India to cater to the credit requirements of Zamindars, who are not covered by the prevailing co-operative agencies. Such banks could provide them with loans for the redemption of debts and long-term agricultural requirements. The State could encourage the growth of such institutions by guaranteeing the repayment of capital and interest of debentures of these banks and even providing them with a portion of their initial capital.

The Reserve Bank of India in Relation to the Co-operative Movement :—Under the Reserve Bank of India Act 1935, the Reserve Bank is allowed to purchase, sell and rediscount agricultural bills and promissory notes endorsed by a scheduled bank or a provincial co-operative bank drawn for the purpose of financing seasonal agricultural operations, or the marketing of crops, and maturing within nine months, while in the case of commercial bills the period allowed is only three months. The Reserve Bank is also authorized to make loans or advances for ninety days to provincial co-operative banks and central land mortgage banks declared to be provincial co-operative banks and through them to co-operative central banks and primary land

mortgage banks against the security of (*i*) Government paper or (*ii*) approved debentures of recognized land mortgage banks, which are declared Trustee Securities and which are readily marketable. The Bank is enabled to extend advances to provincial co-operative banks for ninety days against the security of (*i*) promissory notes of central co-operative banks and drawn for financing seasonal agricultural operations; (*ii*) promissory notes of approved co-operative marketing or warehousing societies endorsed by provincial co-operative banks and drawn for the marketing of crops; (*iii*) promissory notes of provincial co-operative banks supported by warehouse receipts or pledge of goods against which a cash credit or overdraft has been granted by the provincial co-operative bank to marketing or warehousing societies.

The Reserve Bank set up the Agricultural Credit Department in April, 1935 as required by the Act, to study all questions of agricultural credit, offer expert advice to the Government and co-operative banks, and to co-ordinate the operations of the Bank regarding agricultural credit and its relations with provincial co-operative banks and any other bank or organization engaged in the business of agricultural credit. The Agricultural Credit Department submitted a Report on Agricultural Credit to the Government of India in December, 1937. The Department has also issued a few interesting and instructive bulletins on the Banking Union at Kodinar (1937), Co-operative Village Banks (1937), Recent Developments in the Co-operative Movement in Burma (1938), and Co-operation in Panjawar (Punjab) (1939), etc. It has also recently published a Review of the Co-operative Movement in India.

The Reserve Bank clearly stated its attitude to co-operative finance. The main function of the Reserve Bank as a central banking institution is to create healthy monetary conditions in which investors can profitably and securely invest their funds and debtors obtain due loan facilities. The Reserve Bank is a lender in the last resort, when other available credit facilities fail to cope with normal business requirements. It cannot act as an apex bank for the co-operation movement. In financing, the Reserve Bank will go by its own decision according to expediency of the circumstances. It will help provincial co-operative banks to tide over temporary shortage of funds and will not grant at present

cash credits to co-operative banks, who are entitled under the Act to receive loans against the pledge of Government securities.

The Reserve Bank advises Co-operative banks from time to time on the practice of sound banking. It suggested to them to advance only short-term loans and maintain adequate liquid resources. One of the conditions for obtaining financial accommodation from the Reserve Bank is that a provincial co-operative bank should maintain with the bank cash balances the amount of which should not be less than 2½ per cent. of the demand liabilities and 1 per cent of the time liabilities of such a bank and that it should submit to the Bank periodical statements prescribed for the purpose. Only a few provincial co-operative banks have taken advances of small amounts from the Reserve Bank against Government securities on a few occasions since 1938.

The Reserve Bank expressed the hope that it will be able to expand its relations with co-operative banks in due course. Attempts should be made to bring indigenous banks within the orbit of the Reserve Bank to enable it to strengthen and stabilise agricultural finance in India.

Co-operative Institutes :—The Bombay Provincial Co-operative Institute aims at propagating co-operative education. The All-India Co-operative Institutes' Association aims at fostering co-operation by co-ordinating the activities of the various institutes. The Indian Provincial Co-operative Banks' Association aims at collaboration among different societies in finance, legislation and administration.

Analytical Study of the Co-operative Movement :—The co-operative movement in India has been started on Government initiative and it is the guide, friend and philosopher of the entire movement. The provinces control the movement through the Registrar of co-operative societies acting under a popular Minister. The provincial governments of Bombay and Madras have helped the Provincial Land Mortgage Banks to raise loans on the guarantee of the Government. Various provinces have inaugurated co-operative training centres to educate officials and non-officials in principles of Co-operation.

It has been observed that in recent years, official control has been expanding to rectify the defects of the movement, which encountered serious difficulties during the post-war period. The movement has grown to unmanageable proportions and the official

tendency has been directed towards consolidation rather than extension. Although the movement requires state assistance, having touched only the fringe of the population, it should be remembered that the basic principle of co-operation consists in self-help, self-reliance. After consolidating the progress made, attempts should be made to leave the movement alone. Spoon-feeding by the state ought to cease after a certain stage. The movement must be encouraged to grow from within.

By results, the co-operative movement stands fully vindicated. It has provided rural finance at reasonable charges and afforded enormous facilities of cultivation and marketing to agriculturists, who have also been taught to live a better life. Equally artisans have reaped substantial benefits in the form of credit and marketing facilities.

Despite the progress made so far, the movement has revealed certain weaknesses, which ought to be rectified. Co-operation has been universally recognised as the best mechanism for improving both agricultural and cottage industries. It is imperative to re-orient and re-vitalise the movement pruning all the defects revealed in past working. In its statutory report, the Agricultural Credit Department made some notable suggestions. The overdue and long-term loans of co-operation societies should be separated from short-term loans and they should be so scaled down that they can be repaid out of agricultural profits within 20 years. This can be done partly by writing off from resources and partly by selling assets of the borrower and the balance should be transferred to a Land Mortgage Bank. Fresh loans should be given preferably in kind. Crop Loan Societies have been organised in West and East Bengal and Berar to finance current cultivation. Central Banks are being organised and rehabilitated. Greater attention should be paid to build up adequate reserves. Loans ought to be normally confined to cultivation progress. Loans for fixed capital equipment and unproductive purposes should be strictly limited to the repaying capacity of the borrower and widely publicised to prevent him from borrowing elsewhere. Primary societies forming the pivot of the entire movement should be reorganised on sound lines preferably in the direction of multi-purpose societies. They should strengthen their financial position by attracting share capital and deposits from members through thrift and earmark funds for reserves. Primary societies may profitably federate into

Banking Unions in matters of finance, supervision and education. Co-operative marketing should be encouraged and primary societies are suited to undertake the task of co-operative marketing. Central Banks ought to be split up into Banking Unions of convenient size and Central Banks should take greater interest in supervising the work and progress of affiliated members. It is necessary that Provincial Banks must closely supervise the entire movement and offer right guidance to all members. All banks must maintain adequate liquid resources, build up a strong reserve position and exhibit a correct position in balance sheets, disclosing all arrears, overdues and bad debts. They ought to establish contacts with first class commercial banks and accept their guidance. The banks should abandon the practice of advancing loans for long periods with deposits collected on a short-term contract. The Registrar and other staff members of the Co-operative Department should be well tutored in principles of co-operation, agricultural and cottage economics and banking. The following interesting statistics are reproduced.

TABLE I
OVERDUE LOANS IN AGRICULTURAL SOCIETIES, 1944-45
(in lakhs of rupees)

Province	Working Capital	Loans due by individuals	Overdue loans by individuals	PERCENTAGE OF OVERDUE LOANS TO	
				Working Capital	Loans due
Madras	5,75	3,60	86	15	24
Bombay	3,87	2,20	75	19	34
Sind	86	49	26	30	53
Bengal (E. & W.) ...	5,90	3,04	2,59	44	85
Bihar	66	33	18	27	55
Orissa	47	33	21	49	64
United Provinces ...	1,61	1,04	19	12	18
Punjab (E. & W.) ...	5,93	3,17	64	11	20
Central Provinces and Berar	75	53	11	15	21
Assam	14	5	5	36	100
Mysore	50	32	15	30	47
Baroda	61	29	5	8	17
Hyderabad (Dn.) ...	95	58	10	11	17
Gwalior	31	42	21	68	50
Indore	30	27	...	...	...
Kashmir	46	27	11	24	31
Travancore ...	48	21	13	27	62
TOTAL ...	30,53	18,20	6,79	22 (average)	37 (average)

TABLE II

NUMBER OF SOCIETIES BY PROVINCES AND STATES FOR 1944-45

Province	Estimated population (Millions)	Central.	Supervising and guaranteeing unions	Agricultural.	Non-agricultural.	Total number of Societies.	Number of Societies per 1,00,000 Inhabitants.
1	2	3	4	5	6	7	8
Madras	51·3	31	247	11,878	3,452	15,608	30·4
Bombay	21·7	13	117	4,885	1,637	6,652	30·7
Sind	4·9	1	1	859	211	1,072	21·9
Bengal (E. & W.) ...	61·9	120	...	39,624	2,424	42,168	68·1
Bihar	37·9	45	1	8,456	203	8,705	23·0
Orissa	9·1	15	...	2,672	370	3,057	33·6
United Provinces ...	56·2	65	1	17,141	1,104	18,311	32·6
Punjab (E. & W.) ...	29·6	121	...	20,390	5,927	26,438	89·3
Central Provinces and Berar	17·6	36	6	5,469	668	6,179	35·1
Assam	10·5	19	...	1,111	1,452	2,582	24·6
N.-W. F. Province ...	3·4	5	...	943	80	1,028	30·2
Coorg	0·2	1	13	265	57	336	168·0
Ajmer-Merwara ...	0·6	7	9	601	187	804	134·0
Hyderabad administered area (now part of the State)	0·1	...	1	...	18	19	19·0
Delhi	1·3	1	...	240	144	385	29·6
Total (for India and Pakistan) ...	306·3	480	396	1,14,534	17,934	1,33,344	43·5

Indian Co-operative Union :—The 8th All-India Co-operative Conference held at Bangalore in May, 1949, decided to form an Indian Co-operative Union which will in future control and guide the co-operative movement in the country. The Union will devote its attention to the promotion and propagation of the co-operative movement in the Indian Union including the acceding States. It will organize co-operative education and training and conduct researches in the field of co-operation. All future all-Indian co-operative conferences will be held under its auspices. The Union will also publish the Indian Co-operative Review and maintain a library. The membership of the Union will be open to all provincial co-operative societies, institutions and federations.

TABLE III

NUMBER OF MEMBERS BY PROVINCES AND STATES FOR 1944-45

Province	Estimated population (Millions).	Central (including Provincial and Central Banks and Banking Unions).	Supervising & Guaranteeing Unions.	Agricultural (including Cattle Insurance Socs. & Land Mortgage Banks & Socs.)	Non-agricultural (including other Insurance Societies).	Total number of Members of Primary Societies.	Number of Members of Primary Societies per 1,000 inhabitants.
Madras	51·3	17,454	8,791	8,74,982	8,50,070	17,25,052	33·6
Bombay	21·7	20,242	3,913	3,97,051	5,78,631	9,75,682	45·0
Sind	4·9	3,026	959	26,079	73,520	99,599	20·3
Bengal (East and West) ...	61·9	40,506	...	11,54,388	3,86,292	15,40,680	24·9
Bihar	37·9	6,677	9	2,07,377	39,675	2,47,052	6·5
Orissa	9·1	3,790	...	1,07,127	33,931	1,41,058	15·5
United Provinces	56·2	17,213	97	6,50,621	1,06,108	7,56,729	13·5
Punjab (East and West) ...	29·6	36,500	...	8,40,070	2,48,181	10,88,251	36·8
Central Provinces and Berar ...	17·6	40,542	10,506	87,930	68,939	1,56,869	8·9
Assam	10·5	1,704	...	28,146	1,48,872	1,77,018	16·9
N.-W. F. P.	3·4	1,052	...	27,126	2,382	29,508	8·7
Coorg	0·2	868	306	21,623	10,358	31,981	159·9
Ajmer-Merwara	0·6	1,684	147	14,091	10,062	24,153	40·3
Hyderabad administered area (now part of the State) ...	0·1	...	18	...	15,805	15,805	158·1
Delhi	1·3	505	...	10,009	14,923	24,932	19·2
Total (India and Pakistan) ...	306·3	1,91,763	24,746	44,46,620	25,87,749	70,34,369	23·0

TABLE IV

OPERATIONS OF CO-OPERATIVE SOCIETIES 1944-45 (INDIA AND PAKISTAN)

(In Thousands of Rupees)

	Provincial Banks	Central Banks	Land Mortgage Banks and Societies	Agricultural Societies		Non-agricultural Societies	
				Credit	Non-credit	Credit	Non-credit
Number	11	602	289	1,15,780	20,578	7,472	21,924
Working Capital—							
Share capital	96,12	2,90,81	51,28	5,20,09		10,61,31	
Loans and Deposits held from—							
Members	8,83,01	21,04,50	3,93,33	2,39,64		16,16,30	
Non-members				1,82,01		10,21,51	
Societies	3,21,98	6,77,03	2,99,49	20,79		62,43	
Provincial or Central Boards ...	5,52,17	3,31,06		10,66,09		3,88,15	
Government	30,04	63,13	6,00	15,86		33,38	
Reserve and other funds ...	1,75,26	5,13,05	28,63	10,08,54		6,08,34	
TOTAL ...	20,58,58	39,81,58	7,79,78	30,53,03		47,90,43	
Loans made during the year to—							
Individuals	6,95,53	3,78,49	39,68	11,81,83		18,80,27	
Banks and Societies	9,39,20	35,43,29	38,77	2,91,04		3,75,50	
Loans due by—							
Individuals	1,80,85	1,38,67	3,28,64	18,19,68		20,31,66	
Of which overdue	...	...	4,30	6,79,09		2,33,29	
Banks and Societies	4,55,79	17,70,20	2,79,50	2,71,27		6,24,24	
Profits	14,14	52,93	4,99	81,76		1,48,35	

TABLE V
Working Capital by Provinces and States for 1944-45

Province	Estimated population (millions)	Share capital paid up	Loans & deposits held at the end of the year from: Members	Societies	Provincial or Central Banks	Government	Non-members and other sources	Borrowings of land mortgage banks & societies	Reserve & other funds	Total	No. of annas per head of population
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Madras ...	51·3	3,79	2,12	2,84	7,40	15	7,78	5,46	4,30	33,82	105·4
Bombay ...	21·7	4,11	5,73	2,94	2,56	12	965	66	3,40	29,17	215·1
Sind	4·9	66	2,13	36	26	1	1,85	...	51	5,79	189·1
Bengal [E. & W.]	61·9	3,01	2,32	81	4,71	11	6,36	6	4,06	22,44	58·0
Bihar	37·9	39	39	9	72	24	69	...	41	2,93	12·4
Orissa	9·1	30	6	10	29	4	37	2	22	1,40	24·6
United Provinces	56·2	1,12	36	23	70	...	78	1	96	4,17	11·9
Punjab (E. & W.)	29·6	2,41	1,32	2,05	3,82	1	7,24	2	3,93	20,79	112·4
Central Province & Berar ...	17·6	46	19	17	1,24	1	2,07	12	69	4,96	45·1
Assam	10·5	34	45	5	5	...	51	1	16	1,56	23·8
N. W. F. P. ...	3·4	5	...	6	5	...	16	...	6	38	18·0
Coorg	0·2	6	2	3	5	...	9	...	7	32	256·6
Ajmer-Merwara ...	0·6	8	7	7	5	...	15	1	17	61	162·1
Hyderabad administered area (now part of the State).	0·1	4	38	...	...	...	9	...	3	55	873·8
Delhi	1·3	9	16	5	2	...	14	...	7	53	65·6
Total (India and Pakistan).	306·3	16,93	15,71	9,84	21,91	70	37,93	6,37	20,04	1,29,42	67·6

CHAPTER XIV

A GENERAL STUDY OF INDIAN INDUSTRIES

A Historical Retrospect :—Indian industries attained a high degree of prosperity and perfection during the eighteenth century and began to languish from the beginning of the nineteenth century owing to the working of several unfavourable influences. The few existing industries revealed signs of decay from the second half of the nineteenth century owing to Governmental indifference and foreign competition, which was favoured by the Government to the detriment of Indian industries through the imposition of cotton excise duties, preferential railway rates, etc. The necessity for resuscitating Indian industries began to engage attention from the end of the nineteenth century. The Famine Commissions of 1880 and 1901 traced the origin of famines in India among other factors to a lack of diversification and development of industries. The want of a state policy for the promotion of Indian industries assumed political significance, which was given a concrete shape by the institution of the Indian National Conference in 1905 in collaboration with the Indian National Congress. This alliance worked greatly to annul the partition of Bengal and the Swadeshi movement with its counterpart of the Boycott opened a new vista of hope of industrialisation of the country. A new wave of industrial enthusiasm was witnessed throughout India and a large number of indigenous industrial enterprises grew up, although most of them came to grief owing to haphazard growth, lack of practical experience and financial resources and want of any state encouragement. As a matter of fact, the boycott movement antagonised the Government, who drifted from a policy of laissez faire to one of hostility to Indian industrial enterprises. The few organised industries that existed in India before 1914-18 were the cotton mill industry of western India, the jute industry of Bengal, the coal mining industry of Bengal, Bihar and Orissa, etc. The Tata Iron and Steel Company was inaugurated at Sakchi (Jamshedpur) in 1907 and began working from 1912. Miscellaneous industries in the shape of cotton gin presses, jute presses, paper mills, rice mills, sugar factories,

petroleum refineries, leather works, engineering workshops, etc., also sprang up, but they were mostly of small sizes. Even these industries of importance were largely initiated with foreign capital and enterprise.

The East India Company originally supported the development of industries, which helped their export trade, but subsequently they stopped doing so, owing to the opposition of the vested interests of British manufacturers. India was regarded as the supplier of raw materials and England should provide Indians with all manufactured products. This policy was pursued by the State right up to the end of the nineteenth century. The Government had no comprehensive policy of industrial development and only took piecemeal measures of providing with some technical education and statistical information. Some change in Governmental attitude was indicated in 1905 with the creation of the Imperial Department of Commerce and Industries at the instance of Lord Curzon. The Governments of Madras and United Provinces followed suit and took active steps to help industrialisation in their respective provinces. Encouraged by their successful experiment in the aluminium industry, the Government of Madras gave fillip to handloom weaving, chrome process of manufacturing leather, etc. These state encouragements were resisted by the European commercial community and Lord Morley the then Secretary of State deprecated the Government's initiative to start new industries for experiment and demonstration with the object of eventually transferring them to private enterprise. The dictum of Lord Morley damped all state initiative and a brake was put on further activities of Governments both at the Centre and Provinces. Lord Crewe, successor to Lord Morley, reversed this policy and favoured Governmental initiative for the development of Indian industries. The Government of India were shy in taking active steps, because they had not the requisite equipment and organisation.

Industrial Development during 1914-18:—The war of 1914-18 brought out certain outstanding important features. The cutting of enemy countries' supplies coupled with the pre-occupation of Allies reduced India's imports and demonstrated India's precarious dependence on foreign countries. The absence of foreign competition could not be availed of by India. Japan and America stepped in the Indian market and established strong

footholds. The war also demonstrated how India could be more helpful to the Allies if she had her own industries. These considerations led to the appointment of the Industrial Commission in May, 1916, and it reported in 1918. The Commission strongly recommended the industrialisation of India and that the Government should actively assist in this process of the country's industrialisation. The Commission suggested the creation of technical and chemical services and the establishment of the Provincial Boards of Industries. It suggested that the Government should be equipped with the necessary administrative equipment for the purpose and command up-to-date information on scientific and technical matters.

The Indian Munitions Board :—The Indian Munitions Board was established in February, 1917 to control and develop Indian resources, with special reference to the needs created by the war, to limit and co-ordinate demands for articles not manufactured and produced in India and to apply the manufacturing resources of India to war purposes in order to reduce demands on shipping. It was enabled indirectly to help the growth of indigeneous industries by direct purchases of articles and materials in India, the diversion through the priority system and control over Home indents, of all orders from the United Kingdom and elsewhere to manufacturers in India, assistance to individuals and firms who desired to import plants or engage experts or skilled labour from abroad and the dissemination of information and expert advice to persons prepared to set up new industries in India. Departments of Industries were instituted at the end of the war in all provinces according to the recommendations of the Industrial Commission. The Munitions Board was subsequently merged in the Imperial Department of Industry and Commerce.

Industries like cotton, jute, iron and steel, leather, engineering, chemicals, minerals, acids, oils, paper, glass, cement, paints, etc. received an unprecedented fillip from the activities of the Munitions Board. Departments of Industries were created in provinces after the war and the Munitions Board was amalgamated with the Imperial Department of Industry and Commerce. After the reforms introduced by the Government of India Act of 1919, the provinces were placed in charge of industries.

Industries during Post-war Period :—There was an industrial boom after the war and a large number of company flota-

tions. Industries reaped large profits and paid handsome dividends. Prices of stocks and shares rose to great heights. The boom was helped by post-war inflation and high prices, but it was rather short-lived.

Signs of an economic depression in India were witnessed from 1920 and it gradually gathered momentum. The demand for goods dropped and prices declined following war exhaustion and the depression was aggravated by the deflation of several foreign currencies. A big slump in the exchange value of the rupee from 1920-21 hit the importers hard, while exporters felt the full impact of the previous high exchange values. New industries built and replacements made during the boom period were faced with great losses. There were a number of company failures and existing industries found it extremely hard to carry on. The subsequent rise in the exchange value of the rupee from 1924 aggravated the severity of the depression in India by placing Indian industries at a serious disadvantage in competition with foreign products. The New York crisis of 1929 brought about a world slump in prices and the Indian economy began to feel the full impacts of these catastrophic drops in prices. There was a severe depression in prices of agricultural products and the purchasing power of the Indian masses was seriously curtailed. The continued depreciation of foreign currencies dumped foreign articles in the Indian market, which could not absorb the supplies. The supplies from indigenous sources and Indian industries and agriculture in consequence were confronted with a crisis of serious magnitude.

There was a turn of the tide from 1932, when nearly all Indian industries showed an increase in production. The production of sugar was trebled during 1929-37 and that of cotton textiles doubled. Large increases were also registered by the cement, iron and steel, paper and jute industries. Although there was reduced purchasing power following an agricultural depression, the expansion of industries took place due to protection being granted to several Indian industries, large imports of machineries and stores, and encouragement given under auspices of the Indian National Congress. With large sales and exports of gold in 1931, there was a larger supply of capital which facilitated several company flotations.

Then there was again a recession in 1937-38. During the early part of 1937-38, there was business optimism, agricultural prices recovered and industries were prosperous. The production of sugar, iron and steel, cement, coal, paper, etc., rose, but a set-back set in from October, 1937. There was again a short-lived revival by June, 1938, but unsatisfactory political developments put a brake on industrial revival up to the out-break of World War II.

Protective Tariffs in India:—The Indian industries which prospered during 1914-18 under the stimulus of war revealed signs of weakness when the foreign competition set in. This led to an agitation for giving special encouragement to industries during the initial stages of development. The Committee of the Imperial Legislative Council appointed by the Government in February, 1920 failed to report on the question of the Imperial Preference and a fiscal policy for India. It recommended the establishment of a Fiscal Commission for the purpose. The Fiscal Commission was accordingly appointed in October, 1921. It recommended a policy of discriminating protection to be administered through the Tariff Board and the Government accepted this recommendation early in 1923. Accordingly a Tariff Board was established to investigate the claims of protection, by several industries. The iron and steel, cotton, paper, matches, sugar and other industries were accordingly given protection. This marked a departure in the Governmental policy, which from now onwards became one of helping the industrialisation of India through several means.

Industrial Planning and the Indian National Congress :—Originally the Indian National Congress preferred the development of cottage industries in preference to large-scale mechanical industrialisation. There was a change in the attitude of Congress from the Presidentship of Subhas Chandra Bose, when it was realised that the development of large industries was essential for the prosperity of the nation and enhancing the international prestige of India. The Provincial Industries Ministers met at a Conference in Delhi in October, 1938 and appointed a National Planning Committee with Pandit Jawaharlal Nehru as President to lay down a comprehensive plan for the economic development of India. The Committee sub-divided itself into 31 groups. It was the aim of the Committee to plan development in such a way

that India's standard of living might be doubled within a period of 5 to 10 years. The work of the Committee was suspended since September, 1939, but was revived from September, 1945. The Committee finished its work in March, 1949 and was dissolved after submitting its report to the Congress President and a copy of the report was sent to the Government. All provinces and States evolved their own Post-war Reconstruction Plans and some have started implementing their schemes of industrialisation in practice with their own funds and grants and loans received from the Centre.

The Bombay Plan :—The Bombay Plan for the economic development of India framed by eight leading industrialists evoked general interest. It aimed at doubling the per capita income within 15 years of the working of the Plan. As population has been increasing at the rate of 5 millions a year, it would require trebling national income to achieve the objectives of the Plan. This meant increasing industrial production five times and agricultural output twice the existing levels. In order to secure a minimum standard of living, a per capita income of Rs. 74 at pre-war prices would be essential. The Plan classified industries into basic and consumption goods industries. The former included power-electricity, mining and metallurgy, engineering, chemicals, armaments, transport—Railway engines, wagons, ship-building, cement, etc.

The development of power industries was deemed essential for an overall growth of industries on all sectors. The potential reserves of hydro-electricity in India were estimated at 27 million kilowatts, out of which only half a million was developed so far. Consumption goods industries to be developed included textiles, leather, paper, tobacco, oils etc. The scheme also envisaged further extension of small industries to secure additional employment. On the agricultural side, the Plan provided for additional railway mileage of 2,100 miles and doubling road mileage of 3,00,000 miles. More harbours should be built to step up coastal shipping. It recommended the increase in the production of those crops which were necessary for feeding the population in accordance with the requirements of a nutritive diet. Co-operative farming was recommended to be the future pattern of our agricultural economy. Schemes of afforestation should be launched

in order to prevent further soil erosion. Improvements in yield ought to be brought about by better irrigation, better rotation of crops, use of better varieties of seeds, manure, scientific types of implements etc. It also recommended the establishment of a model farm for every group of ten villages in order to educate the farmers in the use of improved methods of farming.

The estimated total cost of the 15-year plan is Rs. 10,000 crores which the authors of the plan expect to realise from the following sources:

External Finance:		
	(Rs. crores)	
Hoarded Wealth	300	
Sterling securities	1,000	
Balance of Trade	600	
Foreign Borrowing	700	
		2,600
Internal Finance:		
Savings	4,000	
Created money	3,400	
		7,400
		10,000

It is recognised that the estimated average per capita income of Rs. 65 is an arithmetical average which bears little relation to the real low income realised by the majority of the population. The per capita average itself varies from Rs. 51 to Rs. 168 in rural and urban areas, respectively. In 1931-32, one-half of the total urban income was in the hands of less than 10% of the urban workers. In rural areas, the income of the majority of the people must be less than the average of 51 rupees, because farmers holding less than 2 acres of land form a large proportion of the cultivating classes. Cultivators are usually unemployed for 3 to 6 months in the year and agricultural labourers earn not more than 2 to 3 annas per day. The Plan therefore argued for a more equitable distribution of the national dividend, because increased production ultimately could be sustained through high consumers' demand, following an increased standard of living. Death duties

and the decentralisation of the ownership of the capital equipments of the country were in consequence advocated. There is also a provision for social security in the shape of sickness insurance, old age pensions, technological unemployment insurance etc. The Plan envisaged state control in the economic life of the country in varying degrees.

American Technical Mission :—Although the American Technical Mission headed by Dr. Henry Grady was appointed in April, 1942, to investigate into the possibilities of India's production of war materials, it mentioned in its report in June, 1942, schemes of post-war industrialisation. The Commission recommended the regimentation and rationalisation of Indian industries. It urged the possibilities of increasing power alcohol, electric power, steel output and aluminium. It advocated the conservation of tin and rubber and favoured the increase of the Government's programme of training in special institutions and industrial plants.

India's Opportunity during World War II :—Foreign supplies were cut off and increased war demands presented Indian industries with a unique opportunity, which was accelerated after Japan joined the war as an enemy. India became the supply centre of allies for the East. This was emphasised by the Eastern Group Conference at New Delhi in October, 1940 and the visit of the Roger Mission to India. The Eastern Group Council was located in this country. The modernisation of the Indian army as recommended by the Chatfield Committee gave a further fillip to the growth of Indian industries. The Department of Supplies was created and large orders for Indian goods were placed from overseas and from inside the country. Numerous war factories were started and production in ordnance factories was expanded. During war, India became a bee-hive of activities and supplied numerous articles for the successful prosecution of the war. Meanwhile, the policy of the Government changed and it committed itself to the active industrialisation of the country. The Government assured the new factories producing pipes, tubes, aluminium, etc., that they would be protected during the post-war period, if foreign competition was found to be harmful. Under the Sargent Committee's recommendations, the Government launched in an ambitious programme of training war technicians.

The opportunity of training Indians in English factories under the Bevin scheme was fully utilised.

Post-war Reconstruction Committees :—The Government of India set up the official Post-war Reconstruction Committee in June, 1941, which appointed four sub-commitees, namely, Labour and Demobilization Committee, Committee on Disposal of War Contracts, Committee on Public Works, and Committee on International Trade and Agriculture. Subsequently a fifth Committee, drawn from Indian Universities, was set up. The Reconstruction (Co-ordination) Committee was intended to co-ordinate the activities of the five Committees and to supply the necessary materials to them. The Co-ordination Committee was to receive the reports of other committees and guide them whenever necessary. These sub-Committees were composed of both officials and non-officials.

The Labour and Demobilisation sub-committee was to form a stastistical estimate of the increasing volume of employment in the industries primarily affected by war demands, *viz.*, ordnance and clothing factories, engineering, textiles, etc.; to consider how far labour actually employed in a given direction could be employed in other directions without re-training; what, if any, arrangements for re-training could be instituted and what the direction of re-training should be; finally, whether any arrangements for relief works would be necessary and, if so, where and under what conditions of pay, terms of employment, etc.; to keep in close touch with the army authorities so that their plans of demobilization should not accentuate the problem of employment on the cessation of hostilities, and to consider whether the existing facilities of linking up the prospective employer with the employee were adequate in view of the employment crisis in the post-war period. The problem of employment is now being tackled by the Director-General of Re-settlement and Employment Exchanges. The aim of this department is to devise suitable methods of employing people in jobs, according to capacities and aptitudes. The department has also schemes of training people in different occupations. The object is to rationalise employments throughout the country in a disciplined manner to derive optimum benefits from both the employers' and employees' points of view. The duty of the Disposal of War Contracts Committee was to suggest arrangements in order to prevent the whole economic

structure from being demoralised by a sudden cessation of war production, to taper off war production as commercial demand extended and to arrange for the orderly disposal of surplus stocks so as not to break prices and check incipient demands for new production.

The Committee on Public works and Government Purchase Policies was to investigate the problem of utilisation or re-employment of demobilised labour by evolving a Public Works Policy, which would accelerate Public Works as war demands tapered off. The Committee on International Trade and Agriculture was concerned with trade, internal trade and agricultural policies. The Consultative Committee of Economists was entrusted with the task of advising the Government in evolving suitable Post-war Reconstruction Plans and co-operating with other Reconstruction Committees.

The Government set up a Planning and Development Department in August, 1944 and several Policy Committees were established on various subjects. The Industrial Adviser worked in collaboration with other Departments. The Government also started a Board of Scientific and Industrial Research in 1940 and established it on a firm footing by an annual grant of Rs. 10 lakhs for a period of five years in the first instance.

In spite of all these planning committees, no substantial results were achieved in practice. Although Provinces ennuciated their five-year plans in co-operation with the Central Planning Department, nothing much was done in practice, due to lack of co-ordination among various planning organisations and absence of requisite knowledge of the civil servants, who were placed in charge of various schemes. Subsequently all these schemes had to be put off owing to Governments' pre-occupation with the mounting food crisis and Refugee problem, following the division of the country. The partition of the Indian sub-continent confronted the Governments with peculiar problems of trade, industries and employment. Large numbers of people were uprooted from their traditional livelihood and migrated into India helpless and destitutes. The Government of India tackled this huge problem of the refugees with vision and calmness. Already a large sum exceeding Rs. 32 crores have been spent for the rehabilitation of the refugees, who are being engaged in useful occupations of various categories. The Government has been

pursuing sound schemes of absorbing the refugees in cottage and small industries and agriculture.

Industrial Backwardness of India :—Despite a gratifying expansion of Indian industries during the post-war period, the industrialisation of India is still far from what is desirable and not commensurate with our population and resources. It has been rightly urged that the rapid industrialisation of the country is essential for raising our National Dividend and stepping up the standard of living of the masses. An industrialisation of India does not imply neglect of agriculture, which at present occupies disproportionately larger importance in national economy. A balanced development of agriculture and industry is desirable for a sound and healthy economic structure of our country. Agriculture and industry should be simultaneously expanded and improved as complementary to each other. The industrialisation of the country will greatly assist agriculture by making increased demands for agricultural products and pave the way for the modernisation and mechanisation of our agriculture through relieving pressure of population on land. Industries also will benefit substantially from an improved agriculture, which by increasing the purchasing power of the masses will create an extensive market for consumers' goods.

The prevailing industrialisation of India is characterised by certain outstanding drawbacks. Indian industries have specially grown in spheres, where risks are small and chances of profit are large. They have developed in a haphazard fashion and are unevenly distributed throughout the country. It is gratifying to observe that in order to have a balanced development of industries, the Government have evolved a programme of controlling major industries and introduced a system of licensing. The Government purports to decentralise industries and plan new industries in suitable areas throughout the country.

So far, Indian industries have precariously depended on foreign supplies for semi-manufactured goods, stores, equipment and mechineries. The lack of machinery-making, chemical and metallurgical industries, which are basic industries is an outstanding defect of India's industrial advancement. Heavy industries like iron and steel, heavy chemicals, ship-building, etc., which are the nerve centre of all other countries have not been sufficiently

developed. In order to remedy this defect, the Government of India have planned to develop these basic industries either as purely nationalised enterprises or in co-operation with private capital. There is a lack of technical personnel in this country and it is hoped that the Government's policy of encouraging the employment of foreign capital in India will meet this difficulty and suitable measures will be adopted to train Indians in the higher technique of industrial undertakings. Although Indian entrepreneurs of the calibre of Tatas have not been many, it is reasonably anticipated that there will be no dearth of first class businessmen, once the ground for an all-round industrialisation is well prepared. Indian labour is intermittent, inefficient and migratory in character. It is true that considerable improvements have been effected in recent years in the character of Indian labour, there remains still much to be done. Indian labour contains all the essentials of a good worker and with proper training and organisation, they can be made as good as they are in any other country. The Government of India have undertaken an extensive programme of creating an efficient and contented labour force through measures of welfare, social security, education and training.

In spite of vast potentialities, India has not yet sufficiently developed her power for her industries. Indian industries have hitherto relied largely upon coal, which is after all limited. In order to have a full-fledged industrialisation of the country, it will be fundamentally necessary to develop our water resources more fully. It is gratifying to observe that the Government have already engaged in an extensive programme of river valley projects, which on completion, are anticipated to yield between 25 to 30 million kilowatts of power.

India is enormously rich in forest resources, which are as yet insufficiently developed. The Government of India are investigating into the possibilities of forest development on a more extensive scale and the recently held South-East-Asia Forest Conference has clearly demonstrated the great potentials, which Asia possesses in forest resources.

Regarding the financing of industries, it was often said in the past that Indian capital is rather shy. In view of the fact that capital in India is invested to the extent of over Rs. 620 crores in

joint-stock enterprises, it will be now out of the mark to hold the view that Indian capital is shy. It is recognised that Indian capital is quite prepared to be invested in industries and commerce, provided the private investors are assured of a reasonable return on their investments. At present there is a stagnation in the capital markets and this is not due so much to inherent shyness of Indian capital as to other extraneous factors. Private capital has been scared away in recent years by exaggerated fears of nationalisation and prevailing high rates of taxation. It is however gratifying to know that the Government has been lately making best endeavours to encourage the formation of capital and savings by trying to give reliefs in taxation as far and as fast as practicable, consistent with the fiscal requirements of the state. The Government has also declared that there is a large field for private enterprise, which can grow uninterrupted by any fears of nationalisation. In spite of the amount of indigenous private capital, it is recognised that the financing of Indian industries require positive improvements.

Industries normally require finance for two purposes, namely, Fixed Capital or Assets and Circulating Capital or Current Assets. Money utilised for fixed assets is usually blocked up for a long period and its repayment is therefore spread over a considerably long period, while the finance required for current assets is repayable as soon as finished goods are disposed of.

On an analysis of India's money market, it will be clear that the prevailing credit institutions are essentially suited to short-term financing, while excepting private capital, Indian industries lack in suitable provisions for long-term credits in the absence of industrial or mortgage banks. The Reserve Bank of India is essentially a bankers' bank and is not meant for directly financing industries. The joint-stock banks and foreign exchange banks which derive their deposits repayable after a short period are not suited to long-term finance and experience showed how several Indian joint-stock banks came to grief by blocking their funds in long-term projects. They can provide industries with short-term credits. Indigenous banks are not capable of financing industries owing to their limited resources per individual unit and their lack of experience of the working of industries. The co-operative credit institutions are neither suitable for the purpose, except that

they may be utilised in a limited way for financing small-sized industrial units.

Several large industrial enterprises in India are therefore obliged to rely for finances upon managing agents, who not only buy a large block of shares and debentures of companies under their management, but also provide such companies with a substantial amount of working capital. It has also been found in practice that banks usually finance short-term industrial requirements due to credits, commanded by the managing agents. Mills in Bombay, Ahmedabad and Indore have also a practice of drawing funds from public deposits. This system is rather a precarious source of industrial finance, because public deposits may be withdrawn at any time and are likely to prove to be very dangerous during periods of crisis and depression, when funds are mostly required.

Although a few industrial banks were started in this country with the object of providing industries with long-term finance, nearly all of them were subsequently closed down after a short inglorious career. The Tata Industrial Bank was started under good auspices, but it soon ceased to be an industrial bank immediately after commencing business and was ultimately amalgamated with the Central Bank of India in 1923. The Industrial Commission recommended the establishment of special industrial banks, to be operated under Government patronage. The Central Banking Enquiry Committee in addition to recommending the setting up of industrial banks also favoured the establishment of Provincial Industrial Corporations and an All-India Industrial Corporation.

Although the State Aid to Industries Acts have been in existence in East and West Bengal, Bihar, Orissa, Madras, East and West Punjab, Bombay and Mysore since 1923, these Acts have not been of any substantial assistance from the point of view of industrial finance, because the total amounts advanced so far have been rather negligible.

In order to meet the long-term financial requirements of industries, the Government of India has established the Finance Corporation and provinces are also gradually setting up their own Finance Corporations. The Governments of Bombay, Madras and United Provinces have already started their own Finance Corporations.

The Problem of Foreign Capital:—The question of the employment of foreign capital in India acquired special significance from 1923, when India adopted the policy of protection. The problem of foreign capital was examined by the Fiscal Commission of 1921-22 and the External Capital Committee, which was appointed in 1924 in connection with the debates on the Steel Protection Bill in the Legislative Assembly.

Latest unofficial estimates put the aggregate foreign capital in India between Rs. 800 crores and Rs. 1,100 crores, figures which themselves allow for a very generous margin of error. There is more of the element of certainty about the statements that repatriation of capital during the past two years has been of the order of Rs. 60 to Rs. 70 crores and that the bulk of foreign capital invested in India is British, the non-British portion being not more than 10%.

For several years past unofficial estimates have been appearing of the amount of foreign capital held in India and of the rate of disinvestment during and since the war. Such estimates have consisted of more or less intelligent guess work, for the simple reason that public debt having been completely extinguished, remaining foreign capital at charge has been on commercial account, details of which have not been available to the private researcher except in the most general fashion. Nor could private or unofficial estimates be very reliable in the absence of an agreed method of valuation. The Reserve Bank is collecting a census of foreign capital and the results are likely to be available at an early date.

Foreign capital may be obtained either as loan or investment capital. If the internal resources are inadequate for the economic development of a country, there can be no objection to obtaining foreign loan for the purpose and Japan and America have actually taken the advantage of foreign loans to develop their internal economies. There has always been a support of this type of foreign capital in this country, because it is stated that by taking loans, foreign investors are merely paid the due interest charges. Instances of such loans are provided by various state, municipal and port authorities' bonds, debentures of companies and bank loans. Although the Government and semi-government institutions may borrow at comparatively convenient rates abroad, the

External Capital Committee favoured the raising of rupee loans, which are likely to encourage the saving and investment habits of the people and provide industries with first-class papers against which they can borrow from banks and other credit institutions.

Advantages of Foreign Capital :—In order to increase the National Dividend, a rapid industrialisation of the country is urgently called for and it is assessed that indigenous resources are not sufficient to foot the bill of an all-round industrialisation. It is therefore to the economic benefits of the country to allow the investment of foreign capital for the purpose of industrialisation. It is true that profits on foreign capital investments go out of the country, but in return the country derives enormous advantages in huge wage bills. In addition, the country gets the benefit of technical skill, capital equipment and organisation. These benefits are likely to be of permanent value to the country, if foreign capital is persuaded to train Indians in the technique of the industries, which are developed. It is also claimed that foreign capital bears the pioneering risks of enterprises and thus paves the way for the incoming of indigenous capital. In recent years it has, however, been found that Indian capital is coming forward to undertake risks in new enterprises *e.g.*, ship-building, air-craft manufacture, heavy chemicals, etc. Instances are now becoming frequent, where Indian capital is collaborating with foreign capital. Thus for example, Birla-Nuffield combine for the manufacture of automobiles and the Tata-Imperial Chemical industries are illustrative of such joint enterprises.

Disadvantages of Foreign Capital:—It is argued that foreign investments take profits out of the country and constitute as such a drain. Some would like to go so far as to postpone the industrialisation of the country rather than allow such profits to be sent abroad. Objections of this kind take special importance in case of key industries or Defence industries. It has been particularly pointed out that foreign capital should not be utilised in mineral industries, because such assets can never be replaced. Complaints have been made that foreign enterprises are always run by foreigners and they do not allow any opportunities for training Indians nor are they willing to co-operate with Indians in management. This type of complaint was fully justified until recently.

The 1935 Constitution and Foreign Capital :—The Government of India Act, 1935, contained the following important provisions regarding the employment of foreign capital in India.

British subjects domiciled in the United Kingdom cannot be denied the right of entry into British India nor could any disability be imposed on them in regard to travel, residence, the holding of property and of public office or the carrying on of any occupation, trade or profession in British India. No differentiation in respect of taxation against British subjects domiciled in the United Kingdom or Burma and British companies or companies incorporated in the United Kingdom or Burma is permitted. British companies carrying on business in India are eligible for any grant or subsidy to the same extent as is payable to companies incorporated in British India. No ship or aircraft registered in the United Kingdom shall be subjected to any treatment which is discriminatory in favour of ships or aircrafts registered in British India. Permission is given to Indian Legislatures to confine subsidies for the encouragement of trade and industry, in the case of companies not engaged in such branches at the time of the legislation, to such bodies as are incorporated under the rules of British India and which offer facilities for training Indians, and have up to half of their directors Indians. The provisions regarding discrimination hold good only so long as corresponding discriminatory treatment is not shown in the United Kingdom against Indians or Indian companies. Moreover, these provisions would be suspended in case a convention is made between His Majesty's Government and the Federal Government ensuring similarity of treatment to each other's nationals and companies, after the establishment of the Federation.

In addition, the Instruments of Instructions to the Governor-General and the Governors give wide discretionary powers to them in the matter of assenting to bills, enabling them to withhold their assent from any measure which, though not in form discriminatory, would in their judgment have a discriminatory effect. In case of doubt as to whether a particular bill does not offend against the intentions of the Constitution Act in matter of discrimination, the Governor-General and Governors are required to reserve the bill for the signification of His Majesty's pleasure.

Present Policy in regard to Foreign Capital :—It is true that a country would benefit most if all capital could be raised

internally and India should make strenuous efforts to increase her capital within the country. Though the Government of India has been lately pursuing a national policy of developing capital formation in the country, it is recognised that in order to implement the full industrialisation of the country indigenous capital should be supplemented by foreign capital. It is now found in practice that the country does not possess sufficient capital, which is urgently required. Recently it has been felt that the formation of capital has been retarded by a multiplicity of factors, which also account for temporary shyness of available resources. Recent developments in political and economic fronts have also resulted in a transfer of foreign capital out of India and encouragements of foreign investments were lacking. These made the capital market in India extremely stringent. It is however gratifying to observe that the Government is endeavouring its best to revive confidence in the capital market and the latest statement of Governmental policy in regard to foreign capital should be regarded in this direction as a right step.

Now that we have our own Government, there is no reason to be afraid of foreign capital, because it will be allowed to function to the best interests of the country and many of the old objections will appear to be of no validity.

It has been rightly pointed out that foreign capital is desirable at this stage and efforts should be made to attract it to India. Dr. Mathai, India's Finance Minister, correctly pointed out that foreign investments are preferable to foreign loans. In case of loans, India will be committed to regular payments, irrespective of the yields of particular projects and there is no guarantee that these industrial schemes will be remunerative or are likely to give any returns within a specified period. It is not worthwhile to undertake such risks at the present stage of the country's development. He pleaded for foreign investments, indicating that foreign capital should be free to take the usual hazards of business. India will gain substantially from foreign investments, which will simultaneously bring the requisite technical skill and knowledge and capital equipment, which is so difficult to procure under the prevailing economic set-up of the world.

The Prime Minister of India, Pandit Nehru recently announced the Government's policy in regard to foreign capital

and his statement has been received with satisfaction in business circles. The Government has tackled this problem with realism and practical insight. Foreign capital has been welcomed in India, but care has been taken to see that it operates to the benefits of India. Unnecessary restrictions, which are likely to scare away foreign capital have been discreetly avoided.

The Government of India invites foreign investments in a constructive and co-operative role in the development of India's economy. It has been recognised that in order to speed up an all-round industrialisation of the country, Indian capital needs to be supplemented by foreign capital. The necessity of foreign investments has become specially important during recent years, because it is becoming increasingly evident that Indian capital is fast reaching the limit of possible expansion. Foreign collaboration has become imperative under the present economic set-up of the country in order to pool the requisite scientific, technical and industrial knowledge and capital equipment.

All foreign undertakings will be allowed to operate in the same way as Indian enterprises within the framework of the Government's industrial policy and they will be governed by conditions which are equally applicable to indigenous enterprises. Foreign enterprises will be allowed to earn profits and withdraw capital investments and to remit both overseas subject only to considerations of foreign exchange. Fair and equitable compensation will be paid when a foreign enterprise is compulsorily acquired by the state and reasonable facilities will be given for the remittance of such proceeds. It has been announced that major interests in ownership and effective control of a foreign undertaking should vest ordinarily in Indian hands except in special cases. Regarding the employment of personnel, the Government would not object to the employment of non-Indians in technical posts when Indians with requisite qualifications are not available, but the Government attaches vital importance to training Indians for such positions at an early date. The Prime Minister emphasised that the Government of India has no desire to injure in any way British or other non-Indian interests.

The Government of India has also appointed a committee to examine all cases of prospective foreign enterprises and it is understood that a good number of applications for foreign investments in India has already been received.

Managing Agency System :—In India the managing agency system has developed as an important method for managing public limited companies. Broadly speaking, managing agents undertake on behalf of the shareholders of a company to manage the affairs of the latter in return for certain remuneration. The Indian Companies Act defines a managing agent "as a person, firm or company entitled to the management of the whole affairs of a company by virtue of an agreement with the latter, and under the control and direction of the directors except to the extent, if any, otherwise provided for in the agreement, and includes any person, firm or company occupying such position by whatever name called".

The Managing Agents originated in India during the latter part of the nineteenth century owing to the fact that they pioneered new industries in India; they could alone supply to industries trained and efficient managers, and they also supplied industries with finance when capital was shy.

Generally, managing agents in India perform three main functions, namely (*a*) they promote and pioneer new industries, (*b*) provide finance and (*c*) perform day-to-day management of a company like a manager or a managing director.

Though managing agents must be credited with having established in India several successful industries, which even now they are managing, abuses cropped up in the system, which tended to fall into disrepute. These abuses continued in full swing till 1936, when the amendment of the Indian Companies Act statutorily recognised the system for the first time, and attempted to reduce the powers of managing agents in such a way as to purge them of many ills, and keep them going with reasonable safeguards.

The Indian Companies Act defines their exact powers, prevents them from usurping all residual powers as they used to do before, and put them under the control of the Board of Directors. No new managing agents can remain in office for more than twenty years subject to re-instatement by the shareholders of a company, and existing managing agents cease to be in office at the end of twenty years notwithstanding anything contrary contained in previous agreements, subject to reinstatement as in the previous case. A company may remove a managing

agent if he is convicted of criminal offences. Appointment, dismissal and variation in contracts of managing agency agreements are made dependent on shareholders. The remuneration of managing agents can only be stipulated as a certain percentage of net profits with a provision for minimum remuneration in case of inadequacy or absence of profits together with an office allowance. Any other emoluments must be sanctioned specially by the shareholders, and rules have been laid down for arriving at net profits. No company is allowed to give or guarantee loans to managing agents, nor inter-investment of funds is permitted, that is to say, managing agents, when controlling more than one company cannot transfer or invest funds of one company to or in that of another under same management. Managing agents are prohibited from doing on their own account any business which is already done by any of their managed companies. They cannot nominate more than one-third of the Board of directors of any company under their management.

Again, the amendment of the Indian Companies Act has further provided that no managing agency system can be allowed to function in the case of banks and kindred institutions. Managing agents are also forbidden to exist in the case of insurance companies by the Indian Insurance Act of 1938.

In spite of these various statutory safeguards, managing agents are often subjected to criticism, and constant propaganda is afoot to abolish the system altogether. It is rightly contended that whatever might have been their justification in the past, managing agents are now superfluous economic institutions, and the sooner they go the better. In view of the fact that other countries have successfully introduced democratic control of industries through shareholders by appointing paid managers, there is no reason why the same should not be done in India. Moreover, it cannot be gainsaid that already successful industries in India have grown up independently of managing agents, and so the indispensability of the institution is dubious.

In pointing out the economic drawbacks of managing agency firms a distinction ought to be made between European managing agency firms functioning mostly in Bengal, Bihar and Assam, and Indian managing agents, who mostly prevail in Bombay and Ahmedabad.

It may be admitted without any reflection upon Indian firms, that European managing agency firms are more efficient and less expensive. They have, in addition, an inherent merit of taking in "outside talent" as partners in managing agency firms, especially on merit and industrial considerations. Most of them are not usually hereditary in character, and by thus recruiting outside experts, they can maintain continuity of policy and efficiency.

Indian managing agency firms are more or less strictly hereditary, and outsiders are rarely taken in as partners except on urgent financial considerations. They are more expensive and inefficient.

It is also complained that managing agency firms, by controlling more than one concern doing same or different types of business, generally undergo undue strain and exertion. As a consequence, whatever is saved in administration costs is eaten up by inevitable inefficient management due to lack of attention. Besides, if managing agents control more than one concern doing same type of business, it may give rise to undue and unfair competition. Lastly, it should be noted that the danger of managing agency firm type of management consists in the fact that fortunes or misfortunes of managing agents are bound to affect the fate of a company under their management. A company which is doing well may go down, only because its managing agents may not be faring well. In addition, we should remember that managing agents when they speculate in the shares of their companies may so manipulate inside matters of those companies as to redound to evil results as far as the shareholders are concerned.

The managing agents have no links with the public. They have created a divorce between banks and the public. and the result is that banks cannot tap the public for money to utilise it in industries.

Discriminating Protection in India :—The Indian Fiscal Commission laid down the following principles of discriminating protection for the guidance of the Tariff Board, which was set up in 1924, to consider the claims of various industries to protection.

The industry must be one possessing natural advantages, such as an abundant supply of raw materials, cheap power, a sufficient supply of labour, and large home market.

The industry must be one which, without the help of protection, is either not likely to develop at all or is not likely to develop so rapidly as is desirable in the interests of the country.

The industry must be one which will eventually be able to face world competition without protection.

It was further laid down that industries, subjected to the law of increasing returns with possibilities of catering to the entire domestic needs within a reasonably short period should be considered fit for protection. Protection may be adopted as a measure against dumping or depreciated foreign currencies. Bounty-fed foreign articles may necessitate the imposition of protection. Key industries should be specially considered for protection. The Fiscal Commission stressed the importance of administering the policy of protection with the utmost discretion and care. The maxim, "Nurse the baby, protect the child and free the adult" should be followed in practice. In awarding protection, it should be carefully noted that protection is neither too little as to be non-effective nor too much as to destroy all initiative.

Protection in India has been urged on various reasons amongst which the infant industry argument ranks pre-eminently important. It is argued that under protection, a large number of industries is likely to be developed and if they can be guaranteed reasonable profits during the initial stages of growth, eventually they will be able to stand on their feet without any aid. The loss thus encountered in the early stages will be more than offset by the ultimate net gain to the community. Protection is likely to lead to a diversification of industries with all consequential advantages of industrialisation.

Protection is desirable from the national standpoint. In view of vast natural resources and advantages, India will gain considerably from the economic point of view, if she is allowed to attain an adequate measure of self-sufficiency in industrial matters. Protection is also desirable from the defence standpoint. In view of the modern set-up of the world order, it is desirable to render the country as independent as practicable in supplies of economic needs. Protection is likely to lead to a rapid industrialisation of the country with increment of the National Dividend and public revenues. The industrialisation of the country will increase the general purchasing power of the masses, who will be able to pay more taxes.

It should be borne in mind that protection imposes the ultimate burden on consumers, who are made to pay higher prices for the protected goods. It is therefore important to see that protection is given only to those industries, which have prospects of self-sufficiency within the shortest possible period. Protection may be awarded through the media of import and export duties, bounties and subsidies. The mechanism of export duties has been found to be fraught with potential dangers in practice. Export duties raise the price of commodities in foreign markets and may strike at the root of their competitive powers. Any stepping up of prices of exportable goods may mean the loss of foreign markets and it is already evident how Indian oilseeds are falling out of favour with foreign buyers owing to their high prices, following the imposition of export duties. The export duty on cotton textiles has been lately reduced in order to popularise Indian cotton piece-goods abroad. So, the imposition of export duties for the purpose of awarding protection should be avoided as far as possible.

Although several Indian industries, *e.g.*, the iron and steel, cotton, sugar, paper, match industries, etc., have fully vindicated themselves after receiving protection, it is recognised that there must be simultaneous developments in other adjuncts, which are fundamental for an industrial advancement of a country.

Industrial Education in India :—Education is primarily important for a balanced development of a country's economy and India is lagging far behind nearly all civilised countries in matters of education. Even the little progress which we have made in education is essentially defective. Our present education is far too theoretical and academic and does not impart any practical bias. The Wardha Scheme of Education, based on Mahatma Gandhi's basic idea of imparting education in primary schools through some craft or productive work is calculated to remedy the above defect of our educational system. It is being tried out in several provinces and States.

The Fiscal Commission recommended that the Government of India should make it a condition with foreign firms that at the time of receiving any Government orders, they must undertake to employ Indian apprentices and give them full practical training. The necessity of improving the educational systems in India was recognised as early as 1888 when a resolution was passed, urging

the provinces to take suitable action in the matter, but nothing was practically done. The Victoria Jubilee Technical Institute was established in 1877 in Bombay under private initiative to give vocational training. Lord Curzon called an Educational Conference in 1901 at Simla to discuss measures of educational developments. The Conference resulted in making some improvements in the teaching of science at the Universities and awarding a few scholarships for studies abroad. The Industrial Commission, the Calcutta University Sadler Commission, Committees appointed by the Bombay Government in 1921 and 1938, the Zakir Husain Committee and Messrs. Abbott and Wood stressed the importance of developing vocational training and technical education in India. The Industrial Commission among others recommended the provision by local Governments and authorities of a suitable system of primary education with an industrial bias for the artisan and working population, including subsidisation of such of the employers of labour as might undertake to supply educational facilities for the benefit of their employees, provision of industrial or craft schools under the control of the Department of Industries for cottage industries and provision for the training of men for organized industries. In addition to the existing provincial institutions, the Commission recommended the establishment of two Imperial Colleges, one for the highest grade teaching of engineering, and the other for metallurgy and mineral technology.

Under the 1919 Reforms, education became a provincial transferred subject, the promotion of industrial and technical education being controlled by the Provincial Departments of Industries. Owing, however, to financial stringency, no solid results have so far been achieved. Even primary education is making very slow progress in spite of the Primary Education Acts which have been passed in several provinces and the raising of the age of employment of children in factories by the Factory Act of 1922. Thus the present position in regard to general, technical and commercial education is not satisfactory and the actual provision which has been made by Government or private effort is hardly adequate to meet the requirements of the country.

At the invitation of the Government of India two educational experts from England, Mr. A. Abbott and Mr. S. H. Wood, visited India in November, 1936, in order to advise on educational reorganization, particularly on problems of voca-

tional education, and submitted their Report in June, 1937. They recommended that the education of children in the Primary schools should be based more upon the natural interests and activities of young children and less upon book learning. The Indian languages should, as far as possible, be the medium of instruction throughout the High (or Higher Secondary) schools, but English should be a compulsory language in the curriculum of these schools. The expansion of vocational education should not greatly outstrip the expansion of industry. If vocational education does not become heavily specialized and aims at cultivating flexibility of mind and certain personal qualities, moral and intellectual, industry and commerce should be able to absorb a larger proportion of trained men than an exact computation of their existing needs would appear to justify. Every province ought to make a survey of the educational needs of its industries and commerce and thus determine the type of vocational education to be provided, and especially the number of recruits that can be absorbed every year. Industry and commerce must co-operate with educational institutions if the vocational education is to be appropriate and adequate. Such organized co-operation is lacking in India. As the supervisory grades of workers, *e.g.*, the foremen and chargehands hold the key positions in industrial production and efficiency, it is necessary to devote special attention and care on their education and training.

The Government of India appointed the Technical Training Enquiry Committee under Mr. J. Sargent to devise suitable methods of training war technicians. According to the report of this committee, the Government made extensive arrangements for training people for war industries and the full utilisation of the Bevin Training Scheme was also made.

It is true that commercial and technical education has made some headway during recent years, but the progress is not commensurate with the needs and resources of the country. Various technical and vocational institutes have been established throughout the country under both private and Government initiative. The different Railways have provided for training of apprentices in their workshops and major industrial units have also systems of training apprentices, *e.g.*, The Tatas, Burn & Co., Jessops, etc. The Governments have set up weaving institutes and elaborate arrangements have been made for imparting suitable training in

aeronautics and air-craft manufactures. The Sugar Technological Institute and the Jute Research Laboratories are also doing useful work in this direction. The Delhi Polytechnique is rendering useful work in matters of training apprentices.

It is gratifying to observe that the All-India Council of Technical Education recently considered the decision of the Government of India to establish four higher technical institutions in different parts of India. The All India Council for Technical Education have already decided on the location of the institution in the Eastern Zone at Hijli in the district of Midnapur, West Bengal, for which the Provincial Government have offered a plot of about 1200 acres free of cost. The Council have accepted the proposal for the establishment of the Western Zone high technical institution at Kurla (Bombay). The Committee recommended the location of the Northern Zone institution at Cawnpore. The institutions will provide for post-graduate studies and research in engineering and technical subjects, each having 1,000 students in post-graduate classes and 2,000 in the under-graduate courses. The institutions are estimated to involve a capital cost of Rs. 3 crores and recurring expenditure of Rs. 44,00,000 each.

Departments of Industries :—The constitutional reforms of 1919 and 1935 placed upon provinces the responsibility of looking after their own industrial development. The provincial departments are entrusted with the promotion of technical and industrial education ; supply of industrial intelligence ; provision of all-round assistance to industries. Their activities are, however, chiefly confined to the development of cottage and rural industries. A certain amount of useful co-ordination has, however, been effected through the annual sessions of the All-India Industries Conferences, which are attended by the Provincial Ministers and Directors of Industries and also representatives of some Indian States.

It is unfortunate that these departments have not been able to achieve any mentionable degree of success.

The Industrial Chemist in Bengal made useful investigation into the possibilities of utilising the available raw materials of Bengal. The Bengal Training Institute is doing useful researches in local leather and tanning. Industrial surveys have been conducted in East and West Bengal, United Provinces, Madras and Bombay. Although demonstration factories have been started in

some provinces, no substantial results have been obtained except the ink manufacture in Madras.

Provinces have provided for financial assistance to industries through the State Aid to Industries Acts. These Acts have been in force in Madras, East and West Punjab and Bihar and Orissa since 1923. Similar Acts were passed in Bengal and Central Provinces in 1931 and 1933 respectively.

The Bombay State Aid to Industries Act was further improved in 1935. Under the State Aid to Industries Acts, loans can be given to private enterprises for starting new industries, subject to certain conditions. In actual practice, these Acts have been largely availed of by small rather than large-scale industries.

An Industrial Credit Syndicate was set up in Bengal in December, 1936, with State aid for the purpose of financing small-scale industries, but it was abandoned by the Provincial Government within a few years. An Industrial Credit Syndicate was also established in United Provinces in 1936. It may be observed here that the Department of Industries and Supplies at the Centre is interested in industrial matters of All-India importance and has little contact with the provincial departments of industries. The Central Departament, however, tries to co-ordinate the activities of the various provincial departments by offering help, guidance and advice.

Industrial Research :—In order to co-ordinate research, the Fifth Industries Conference held in July, 1934, recommended the establishment of a Central Industrial Intelligence and Research Bureau. The Industrial Research Bureau was accordingly set up in April, 1935. It is attached to the Indian Stores Department and works in collaboration with the Industrial Research Council. The Bureau is entrusted with the collection and dissemination of industrial intelligence, the collaboration with industry in industrial research and the publication of appropriate bulletins, offering advice with a view to industrial standardization, and assistance in the organization of industrial exhibitions.

The Board of Scientific and Industrial Research was afterwards established to further industrial researches in India. The Board is associated with representatives of principal industries and has been conducting useful researches in various industries. Recently, the Government has also set up the Railway Research

Council, which has been given the function of investigating the possibilities of improved railway operations, elimination of waste and exploration of all-round economies in the working of Indian railways.

The Government of India have plans for eleven national laboratories to be established in various parts of the country at a total capital expenditure of Rs. 3,80,00,000. Nine of them are expected to start functioning in a year's time. These laboratories would deal with physical, chemical, electro-chemical, metallurgical, glass and ceramic, leather, building, road, fuel, food technology and drug research.

Planned on lines suggested by foreign experts to cover different aspects of industrial research, these institutions will provide facilities for fundamental and applied research. Pilot plant will be installed to carry the development of industrial processes to a stage where industries can take them directly for large-scale commercial exploitation.

The National Physical Laboratory, now under construction on a plot of 66 acres of land on Pusa Road, Delhi, will be ready in June, the cost being about 78·5 lakhs in land and equipment. Over 180 Indian scientists and technicians will man the laboratory. Dr. K. S. Krishnan will be its director.

Prof. McBain, one of the world's foremost chemists, has been selected as director of the National Chemical Laboratory at Poona. Judging from progress in the construction work on a 430-acre site, the chemical section of the Council of Scientific and Industrial Research may be moved into the laboratory this summer. A staff of 150 scientists will assist Prof. McBain who is expected to assume charge in October.

Work has started with a nucleus technical staff in the National Metallurgical Laboratory at Jamshedpur. Dr. George Sachs, a well-known U. S. metallurgist, has already joined as director of the laboratory. Buildings and equipment are estimated to cost Rs. 50,75,000.

Simultaneously with the construction work, investigation into washability and blending of coals under the direction of Dr. J. W. Whitaker is being carried out in the National Fuel Research Institute at Dhanbad. The main object of the Institute is to ensure the best use of the supply of Indian coal which has been estimated at 65·000m tons with an annual turnover of over Rs. 30

crores. The fuel resources of the Dominion will be surveyed at five stations.

The possibility of manufacturing optical glasses in India is being studied in the Central Glass and Ceramics Research Institute. This will receive special attention from the Institute's new director, Dr. Kriedl.

The nucleus of a building research institute is already functioning at Roorkee; and the Road Research Institute in Delhi, the Central Food Technological Research Institute in Mysore, and the Central Drug Research Institute in Lucknow are expected to be ready for research work before the end of this year. The capital grants for these projects amount to Rs. 57,64,000.

For the remaining two national laboratories—the Central Leather Research Institute, Madras, and the Central Electro-chemical Research Institute, Karaikudi—plans are now being made under expert advice.

A census of technical personnel available in India, is now being taken by the Council of Scientific and Industrial Research under instructions from the Dominion Cabinet. The census has been so planned as to determine the different categories of technical hands and to assess their fitness in their present occupations. It is believed that the number of people possessing requisite qualifications will not exceed 150,000.

In the interest of rapid industrial development, it is necessary to have a planned programme of research and to have special institutions for research. Notable contributions had been made in the field of drug and pharmaceutical research by Indian institutions, but due to several handicaps, the co-ordination between the various branches of drug research has been a rare phenomenon. The Central Drug Research Institute has been set up to meet this need.

The Indian Standards Institute:—Indian goods are greatly handicapped especially in foreign markets by lack of standards and the Indian Standards Institute aims at removing this major defect of Indian industries. A beginning in the settlement of industrial standards has already been made and the Indian Standards Institute now covers three major fields of industry *e.g.*, cotton textiles, engineering and chemicals. The Institute intends to introduce certification marks to identify goods produced in its

standards for maintenance and promotion of the quality of Indian goods in foreign markets and the promotion of the export trade.

Institute of Art in Industry:—The Institute of Art in Industry has been doing useful work in popularising Indian products by advertising them on scientific lines. The institute has been holding a number of successful exhibitions. It is now proposed to extend the services of the Institute to large-scale industry on the lines followed by the Council of Industrial Design in Great Britain. It also aims at extending its services to cottage industries which are likely to benefit substantially. The Institute's survey of Indian designs has been reorganized, and it is proposed to start a series of publications dealing with the subject of design in each industry. Work has already begun on a pilot survey in two selected areas on behalf of the Cottage Industries Board. The Institute also proposes to inaugurate comprehensive courses for the training of industrial designers, either in an independent school of its own or in collaboration with the existing Art and Technological Institutes.

CHAPTER XV

SELECTED INDIAN INDUSTRIES

The Cotton Mill Industry :—The first cotton mill in India was erected in Calcutta in 1818 and the first mill started working in Bombay in 1854.

The early concentration of cotton mills in Bombay was due to capital, credit and transport facilities. The yarn trade with China also helped the Bombay cotton mills in the initial stages. From the year 1877, cotton mills developed in the cotton-growing tracts of Nagpur, Ahmedabad and Sholapur. Later the swadeshi movement gave a fillip to the growth of cotton mills in other parts of India, namely, Madras, United Provinces and Bengal.

The continued exports of yarns to China till 1904-5 gave a unique advantage to the Indian industry and Japan was also India's good customer until 1890. India also exported her cotton textiles to Straits Settlements and Arabia. There was a distinct set-back in the Indian cotton industry from 1905, following exchange troubles and the development of spinning industries of Japan and China. Japan began to export to India cotton goods, but Japanese competition was not keenly felt until after World War I.

The Indian cotton industry continued to enjoy a boom period from the first World War, due to the reduction of foreign imports, war demands and an expanding overseas market. Since 1914, the Indian industry showed continued expansion and her production of piecegoods rose from 1,164 million yards in 1913-14 to 1,614 million yards in 1917-18. The capital investments in the industry rose from Rs. 20·84 crores in 1917-18 to Rs. 40·98 in 1921-22. She produced woven goods of 4,269 million yards in 1938-39. The phenomenal growth of the Indian cotton textile industry is illustrated by the following tables:—(Next page).

TABLE I

PROGRESS OF COTTON MILLS IN INDIA, PAKISTAN AND THE STATES SINCE 1900

Years ending 30th June	Number of Mills	Number of Spindles installed	Number of Looms installed	Average No. of Hands employed daily	Approximate Quantity of Cotton Consumed	
					Cwts.	Bales of 392 lbs.
1901	193	50,06,936	41,180	1,72,883	47,31,090	13,51,740
1902	192	50,06,965	42,584	1,81,031	61,77,633	17,65,038
1903	192	50,43,297	44,092	1,81,399	60,87,690	17,39,340
1904	191	51,18,121	45,337	1,84,779	61,06,681	17,44,766
1905	197	51,63,486	50,139	1,95,277	65,77,354	18,79,244
1906	217	52,79,595	52,668	2,08,616	70,82,306	20,23,516
1907	224	53,33,275	58,436	2,05,696	69,30,595	19,80,170
1908	241	57,56,020	67,920	2,21,195	69,70,250	19,91,500
1909	259	60,53,231	76,898	2,36,924	73,81,500	21,09,000
1910	263	61,95,671	82,725	2,33,624	67,72,535	19,35,010
1911	263	63,57,460	85,352	2,30,649	66,70,531	19,05,866
1912	268	64,63,929	88,951	2,43,637	71,75,357	20,50,102
1913	272	65,96,862	94,136	2,53,786	73,36,056	20,96,016
1914	271	67,78,895	1,04,179	2,60,276	75,00,941	21,43,126
1915	272	68,48,744	1,08,009	2,65,346	73,59,212	21,02,632
1916	266	68,39,877	1,10,268	2,74,361	76,92,013	21,97,718
1917	263	67,38,697	1,14,621	2,76,771	76,93,574	21,98,164
1918	262	66,53,871	1,16,484	2,82,227	72,99,873	20,85,678
1919	258	66,89,680	1,18,221	2,93,227	71,54,805	20,44,230
1920	253	67,63,076	1,19,012	3,11,078	68,33,113	19,52,318
1921	257	68,70,804	1,27,783	3,32,179	74,20,805	21,20,230
1922	298	73,31,219	1,34,620	3,43,723	77,12,390	22,03,540
1923	336	79,27,938	1,44,794	3,47,380	75,30,943	21,51,698
1924	336	83,13,273	1,51,485	3,56,887	67,12,118	19,17,748
1925	337	85,10,633	1,54,292	3,67,877	77,92,085	22,26,310
1926	334	87,14,168	1,59,464	3,73,508	73,96,844	21,13,384
1927	336	87,02,760	1,61,952	3,83,623	84,60,942	24,17,412
1928	335	87,04,172	1,66,532	3,60,921	70,34,237	20,09,782
1929	344	89,07,064	1,74,992	3,46,925	75,64,081	21,61,166
1930	348	91,24,768	1,79,250	3,84,022	90,07,999	25,73,714
1931	339	93,11,953	1,82,429	3,95,475	92,16,116	26,33,176
1932	339	95,06,083	1,86,341	4,03,226	1,01,89,424	29,11,264
1933	344	95,80,658	1,89,040	4,00,005	99,30,053	28,37,158
1934	352	96,13,174	1,94,388	3,84,938	94,63,965	27,03,994
1935	365	96,85,175	1,98,867	4,14,884	1,09,31,949	31,23,418
1936	379	98,56,658	2,00,062	4,17,803	1,11,34,963	31,81,418
1937	370	97,30,798	1,97,810	4,17,276	1,10,13,632	31,46,752
1938	380	1,00,20,275	2,00,286	4,37,690	1,28,19,268	36,62,648
1939	389	1,00,59,370	2,02,464	4,41,949	1,33,37,569	38,10,734
1940	388	1,00,05,705	2,00,076	4,30,165	1,28,79,559	36,79,874
1941	390	99,61,178	1,98,574	4,59,509	1,48,78,577	42,51,022
1942	396	1,00,26,425	2,00,170	4,80,447	1,65,92,627	47,40,722
1943	401	1,01,30,568	2,00,890	5,02,650	1,71,15,763	48,90,218
1944	407	1,02,22,107	2,01,761	5,05,562	1,69,55,920	48,44,564
1945	417	1,02,38,131	2,02,388	5,09,778	1,71,82,599	49,09,314
1946	421	1,03,05,169	2,02,814	4,95,456	1,59,24,762	45,49,932

TABLE II

The following statement shows the quantity (in pounds) of yarn of various counts produced in the sub-continent during the last five years:—

	1941-42	1942-43	1943-44	1944-45	1945-46
1*s.* to 10*s.*	152,256,756	166,572,951	162,804,774	179,802,924	182,837,927
11*s.* to 20*s.*	797,386,289	817,663,852	869,417,781	854,886,410	819,076,803
21*s.* to 30*s.*	333,112,715	315,557,326	373,466,316	336,246,237	342,480,082
31*s.* to 40*s.*	171,769,046	149,509,217	169,992,951	168,018,790	156,232,652
Above 40*s.*	103,326,602	65,922,583	85,392,373	90,106,221	91,157,737
Wastes, etc.	19,326,171	18,510,260	19,388,387	21,864,844	23,031,645
Grand Total	1,577,177,579	1,533,736,189	1,680,462,582	1,650,925,426	1,614,816,846

The first World War boom lasted for a period of about five years, after which the industry was faced with a crisis of serious magnitude, following a general economic depression throughout the world. India's difficulties were further accentuated by the intense competition of Japanese goods. The competitive powers of the Indian industry were further jeopardised by the raising of the exchange from 1*s.* 4*d.* to 1*s.* 6*d.* and the depreciation of the Japanese yen in 1923-25 and 1932. The cotton industry of Bombay was particularly hit hard, where the number of mills decreased from 78 in 1926 to 68 in 1939, while the same rose from 59 to 77 in Ahmedabad.

Since 1926 the question of protection to the Indian cotton industry has been examined by the Tariff Board on a few occasions and it recommended protection in 1927 along with other suggestions for the internal improvements of the industry. The Government appointed Mr. G. S. Hardy, Collector of Customs, Calcutta, in July, 1929, to investigate into the question of foreign competition and he suggested protection to rescue the indigenous industry.

It may be observed here that the cotton excise duty of $3\frac{1}{2}$ per cent put an impediment on the development of the industry from 1894 to 1926. The Government also exempted coarse yarn and cloth from import duty to the detriment of the Indian mills, owing to the persuasion of the Lancashire mills.

Protection to the Indian Cotton Industry:—An import duty of 3½ per cent with an equivalent counterveiling excise duty had been imposed on cotton manufacturers from 1896 to 1917-18. The import duty was raised to 7½% in 1917-18, 11 per cent in 1921-22, but the exemption of all machinery and mill stores from duty was withdrawn, while the excise duty remained at 3½ per cent. The Finance Member proposed in 1922-23 to increase the import duty to 15 per cent and the excise to 7½ per cent, but the proposal was dropped owing to the opposition from the Assembly. A duty of 6 per cent on twist and yarn import was imposed in the same year. There set in a depression from 1923 with low prices, reduced sales, decreased profits and accumulated stocks. Competition was intensified by Lancashire and Japan, and failing to abolish the excise duty and obtain protection, the Bombay mills reduced wages by 11½ per cent. There ensued labour strikes and the depression deepened into a crisis. The Government in consequence appointed a Tariff Board and abolished the excise. The Board proposed an increase in the import duty from 11 per cent to 15 per cent, grant of bounty on higher counts of yarn, abolition of import duty on machinery and mill stores, appointment of Trade Commissioners at Basra and Mombasa, financial aid to a combined bleaching, dyeing and printing plant and appointment of a Trade Mission to explore new markets. It also suggested the introduction of internal economies and improvements in marketing organisation and conditions of labour. The Government accordingly removed the duty on machinery and mill-stores permanently, but rejected the proposal of a bounty on yarn and an increase of the import duty on piece-goods. The Board also expressed the opinion that Japanese competition in yarn and piece-goods trade was rather severe and unfair due to the depreciation of the yen and prevailing double shifts in Japan. The rejection of the Board's recommendation for an increase of the import duty and the bounty scheme raised a storm of protest from the industry and consequently the Government admitted the claim of the industry to protection on 16th August, 1927, and promised to introduce a bill for further protection up to 31st March, 1930. Meanwhile, the import duty of 5 per cent on yarn was changed into 5 per cent ad valorem or 1½ anna per lb. whichever was higher up to 31st March, 1930. The duty on artificial silk was reduced from 15 per cent to 7½ per cent in order

to help the handlooms and diversify the mill production. A Trade Mission which was appointed urged the mill-owners to form a powerful export selling organisation and proposed the appointment of Trade Commissioners at Alexandria, Mombasa and Durban. In 1930-31 Trade Commissioners were appointed at these places as also at Hamburg, Milan and New York. The protection granted to yarn of counts 31s to 40s proved inadequate and the Japanese competition was further intensified. Strikes in Bombay mills were followed by the world depression, and in 1929 the Hardy inquiry confirmed the allegations of the millowners regarding Japanese competition especially in shirtings. The Cotton Textile Industry Protection Act was passed in 1930 and it raised the ad valorem duty from 11 to 15 per cent; imposed a special duty of 5 per cent on non-British goods and a minimum specific duty of 3½ as. per lb. on plain greys of both British and non-British origin. These measures were to remain in force till March, 1933. In order to meet the revenue needs of the Government an additional duty of 5 per cent ad valorem on imports of piece-goods and a surcharge of 25 per cent on all import duties were imposed in 1931. The effect of these measures was that the general duty on piece-goods was 25 per cent ad valorem or 4⅜ annas, whichever was higher on non-British goods. The ad valorem duties prevailed on other goods. The duty was 40 per cent on silk goods but on imported machinery a duty of 10 per cent and on raw cotton a duty of ½ anna per lb. were imposed, and these handicapped the development of the industry. In spite of the 5 per cent preference the imports from the United Kingdom did not register any substantial rise inspite of the 5 per cent preference, while imports from Japan continued to increase and depress the cloth prices in India, following the depreciation of the Japanese currency.

Another Tariff Board investigated the case of the industry for increased protection against Japanese goods in 1932. According to the recommendation of the Tariff Board the duty on non-British piece-goods was raised from 31¼ to 50 per cent ad valorem and the specific duty on non-British plain grey goods from 4⅜ to 5¼ annas per lb. On 31st August, 1932 Japanese dumping reappeared and the Government denounced the Indo-Japanese Convention of 1904 and enhanced the duty on Japanese goods to 75 per cent ad valorem and 6¾ annas per lb. from 7th June 1933

under the Safeguarding of Industries Act of 1933. Meanwhile the operation of the duties of 1930 was extended first to October 1933 and then to April 1934 pending the conclusion of the Indo-Japanese negotiations for a new Trade Agreement. Japan retaliated by reducing her off-take of Indian cotton and sent a delegation to India following the enhancement of the duties. After protracted negotiations an agreement was reached and from 8th January, 1934, the duty on Japanese goods was reduced from 75 to 50 per cent ad valorem with a minimum specific duty of 5¼ annas per lb. on plain greys. The Commercial Treaty signed in London on the 12th July, 1934, fixed a quota of raw cotton to be purchased by Japan and the quantity of cloth to be purchased by India annually at 1 million bales and 325 million yards respectively in addition to the prevailing duties. The maximum quota allowed to Japan was fixed at 400 million yds. a year, the excess over the basic quota of 325 million yds. to increase by 1½ million yds. for every 10,000 bales of the excess over 1 million bales, exclusive of exports of either cloth or cotton. The operation of the Treaty was extended in 1937 to 1940 and thereafter the declaration of war by Japan postponed any further extension. The Japanese industry at the end of World War II had shrunk to about 25 per cent of her pre-war capacity and prospects of renewed imports from Japan are in consequence remote in the near future. The new Indo-Japanese Agreement of 1937 reduced the basic quota of cotton and the maximum limit of imports of piece-goods was reduced to 358 million yards on condition that Japan took 1½ million bales of cotton annually. This quota excluded fents the imports of which had been limited to 8,950,000 yds. annually and the maximum duty on cotton fents had been fixed at 35 per cent.

In the meantime the Mody-Lees Pact was signed on 8th October, 1933. Accordingly duties on British cotton yarns and piece-goods and artificial silk were reduced in exchange of Lancashire's effort to consume Indian cotton in increasing quantity and Lancashire agreed a reasonable protection being accorded to Indian textiles industry. She also undertook to assist the Indian textile industry to develop overseas markets. This Agreement expired in 1935 when a special Tariff Board was appointed and on its recommendations the duty on plain greys was reduced from 25 per cent or 4⅜ annas per lb. to 20 per cent or 3½ annas

per lb. whichever was higher; the duty on bordered grey, bleached and coloured other than printed was reduced to 20 per cent ad valorem, while the duty on yarn was continued at the old figure. From 15th June, 1936, under the Indo-British Trade Agreement of 1935, the U. K. Government undertook to take further steps to stimulate the use of Indian cotton in all possible ways and to invite colonial and Empire Governments to accord a favourable treatment to Indian cotton goods in exchange of a lowering of the duty on Lancashire goods by the Indian Government. In spite of these concessions imports from Lancashire were only 343 million yds. in 1937-38, compared with 1,500 million yds. in 1927-28. Another deputation came from Lancashire for stepping up her sale in India and for securing a sliding scale of duties from 17½ to 7½ per cent, but the negotiations failed. The Imperial Preference on British cotton piece-goods was linked up with the off-take of Indian cotton by the U. K. on a reciprocal graduated scale under the Indo-British Trade Agreement of 1939. The basic rates of duty on British cotton piece-goods were reduced to 17½ per cent on printed goods, 15 per cent or 2⅝ annas per lb. on grey goods, and 15 per cent on others, subject to a further reduction of 2½ per cent if British imports into India did not exceed 350 million yds. until they reached 245 million yds., and to a similar increase if the imports increased to 500 million yds. until they declined to 425 million yds. The duty could also be increased if imports of raw cotton into England dropped below 4,00,000 bales in 1939 or 1940 and below 4,50,000 bales in any other cotton year. If the imports exceeded 7,50,000 bales the duty should be reduced. With effect from 17th April, 1940, the imports from Lancashire dropping below 350 million yds. the duties on grey piece-goods excluding bordered chadars, dhoties, saries and scarfs were reduced to 12 per cent ad valorem or $2\frac{3}{11}$ annas per lb., on printed goods to 15 per cent ad valorem, on printed piece-goods and printed fabrics not otherwise specified of British manufacture 12½ per cent ad valorem and on other fabrics of British origin 12½ per cent ad valorem. The period of operation of the protective duty on cotton piece-goods was extended by the Indian Tariff (Third Amendment) Act of 1939 in April to 31st March, 1942. The Government however took a retrograde step in 1939 by doubling the import duty on raw cotton from 6 pies to 1 anna per lb., which was further increased to 2 annas

per lb. This measure affected adversely the manufacture of finer fabrics in India and encouraged imports.

The protection granted to the industry up to 1942 was extended to expire on 31st March, 1947.

Towards the end of 1946, the Government of India requested the Tariff Board to hold a summary enquiry and advise whether, in the present circumstances, protection at the existing or at a different scale should be granted to the cotton textile manufacturing industry for a further year after the 31st March, 1947. The Tariff Board after consulting the interests concerned, made the following recommendations:—

(*i*) The industry has failed to substantiate its demand for extension of protection, and the protective duties should be allowed to expire on the 31st March, 1947, to be replaced, however, by such revenue duties on cotton textiles as may be imposed on budgetary considerations. There should be only one scale of duties and that should be the lower of the two existing scales.

(*ii*) Any declaration of expiry of protection should be accompanied by a definite and categorical announcement that deprotection does not signify any weakening in the interests of Government in the well-being and integrity of the cotton textile manufacturing industry which is the premier industry of the subcontinent. A tariff enquiry should definitely be guaranteed to the industry as soon as imports of cotton piece-goods exceed for three months running a monthly average of 25 million yards unless the industry itself asks for a tariff enquiry earlier, in order to determine whether the volume and prices of imports affect the position and integrity of the Indian industry so as to call for re-imposition of protection.

(*iii*) The import duty on yarn is doing no good to the Indian mill industry, while its existence imposes some hardship on the handloom industry; there should, therefore, be no duty on yarn, protective or revenue.

(*iv*) The recommendations in regard to duties on cotton textiles should apply to the imports of artificial silk and cotton and art silk mixed fabrics.

Government after carefully considering the report submitted by the Tariff Board, announced their decisions as under:—

1. Government accepted recommendation (*i*) of the Board on the main issue before it, *i.e.*, the protective duties

on cotton piece-goods and yarn should expire on the 31st March, 1947.

2. Recommendation (*ii*) also was accepted.
3. As regards recommendation (*iii*) Government stated that the rates of revenue duties which would be imposed on imports of cotton piece-goods and yarn were under consideration and would be announced at the proper time. Accordingly by the Indian Tariff (Amendment) Act 1947, the existing protective duties on cotton cloth and yarn were converted into revenue duties without any change whatsoever in the quantum.
4. Government did not accept recommendation (*iv*) and the protection for cotton and artificial silk mixed fabric was continued for another year and has been extended for another two years in 1948.

Post-War Development of the Indian Cotton Industry :— The World War II gave an unprecedented fillip to the expansion of the Indian cotton textile industry, which was called upon to meet an enormous war demand, provide overseas markets with piece-goods and feed fully the domestic market in the absence of any imports. The following table brings out the essential features of the industry in the Indian Dominion and Pakistan:—

	Year ended 31st August 1947	1948
Number of mills ...	423	422
Paid-up capital (Rs. in crores)	63·32	74·93
Spindles installed ...	10,353,973	10,433,065
Spindles working ...	9,584,257	9,580,227
Looms installed ...	202,662	202,072
Looms working	184,790	185,360
Cotton consumed (in candies of 784 lb.)	1,986,078	2,141,487
Number of workers (day shift)	488,370	476,145

India is now one of the leading cotton textile manufacturing countries of the world: she ranks fifth in number of spindles, fourth in quantity of raw cotton consumed and third in the number of persons employed. In relation to the world cotton industry, the Indian industry ranks second from the point of view of the volume of cotton consumed and fifth in point of spindles and looms installed. It consumes more than half of

the total cotton crops, directly gives employment to about 8,00,000 workers and affords subsidiary employment to numbers of persons engaged in various trades directly dependent upon cotton mill industry for their existence. The Indian mills and the handloom industry between them satisfy now two-thirds to three-fourths of the enormous demand of the home market and a small export trade in cotton manufactures has recently grown up. By 1944 there were 407 cotton mills with a paid-up capital of over Rs. 52 crores and an investment of over Rs. 100 crores producing 4,870 million yds. of cloth. Still the per capita consumption of cloth in this country is the lowest in the world being only 16 yds. a year as against 64 yds. in U. S. A., 36 yds. in Sweden, 35 yds. in the U. K., 21 yds. in Japan. During the war and at present, thanks to the controls and restrictions and the war-time changes in the quality and quantity of goods produced, the per capita consumption has been reduced to 12 yds. only, although there is probably a demand for 25 yds. per head due to the increased purchasing power in the country. There is an acute shortage of cloth all over the country at present even though the pre-war per capita consumption of about 16 yds. has been reduced to 12 yds. only. The indigenous industry met in 1900 about 10 per cent of the domestic demand, 39 per cent in 1920-25, 57 per cent in 1931-33 and 65 per cent in 1940-41. The Indian mills supplied 512 million lbs. of yarn in 1943-44 to the handloom industry, which produced about 1,600 million yards of cloth per annum.

The Present Position of Cloth Supplies in India :—Despite an enormous expansion of the Indian cotton mill industry, there remains an acute shortage of cloth in the country. The National Planning Committee and the Bombay Plan fixed 30 yards as the minimum per capita consumption to be aimed at and the Gandhian Plan suggested a per capita consumption of 20 yards for the rural population. At present mills in India produce about 4,800 million yards and the handloom industry 1,500 million yards, making an aggregate of about 6,300 million yards per year. After providing for exports and Defence requirements, the civilian population is left with about 4,800 million yards, which work out at 12 yards per head per year. The Governments have allotted in various parts of the country a cloth quota of not exceeding 18 yards per head per year. It is thus clear that the per capita cloth consumption in India compares unfavourably with 64 yards in the

United States of America; 35 yards in the United Kingdom, 36 yards in Sweden and 21 yards in Japan. There is therefore a good scope for the expansion of the cotton textile industry in India.

With the expansion of the indigenous industry, Indian cotton mills have extended production of finer counts and at present the major part of Indian production belongs to this category, because mills usually earn better profits in this line as compared with coarse varieties. It is gratifying to observe that the Government of India have now laid down a compulsory quota of coarse cloth to be manufactured by all mills in the country. Coarse cloth is popularly designated as "Standard" or "Utility" cloth. This is likely to meet the demands of the general masses to a large extent.

Location of the Indian Cotton Mill Industry :—In 1892-93 about 74 per cent of the mills were in the Bombay Province (largely in Bombay and Ahmedabad cities). In 1911-12 Bombay Province had 68 per cent of the total number of mills. In 1943 there were 203 mills in this Province out of a total of 407; Madras has made the largest progress in recent years, the number of mills, spindles and looms having gone up from 12 mills with 440,360 spindles and 3,139 looms in 1929 to 65 mills with 1,480,000 spindles and 6,492 looms in 1943. The development of hydro-electric power has helped a lot in the emergence of a large spinning industry in South India, where the most important centres are Madras, Madura and Coimbatore. Bengal has also experienced in recent years a rapid progress, the number of mills, spindles and looms having increased from 13 mills, 362,000 spindles and nearly 3,000 looms in 1921 to 34 mills, 476,000 spindles and about 11,000 looms; and Bengal now occupies third place among cotton manufacturing Provinces. The United Provinces, Central India and Delhi are other important centres of the industry in India. In recent years the industry has made rapid progress in many Indian States except Indore. The important State centres are Baroda, Bangalore, Hyderabad, Cochin, Gwalior and Indore. At present there are 17 mills in Kanpur out of which 15 are in Kanpur city. Three out of these sprang up during the last war and are small weaving units only. Although the number of mills has not risen substantially during the last 10 years, the quantity of cotton consumed has increased by 62 per cent and employment is nearly 50 per cent higher than in 1935.

The regional distribution of the industry is illustrated by the following table:—

	No. of mills	No. of spindles (a)	No. of looms	Workers (a)
Bombay City and Island ..	65	28,66	65,880	123
Ahmedabad	74	18,47	42,816	76
Other centres	70	12,94	26,507	68
Total: Bombay Pr. ..	209	60,07	1,35,203	267
Rajputana	10	1,34	3,029	8
Berar	4	68	1,474	4
C.P.	7	2,98	5,378	18
Bihar and Orissa ..	2	26	745	1
Hyderabad	6	1,18	2,462	7
C. India	17	3,97	10,922	26
W. Bengal	29	3,90	8,909	21
E. Punjab	4	38	780	2
Delhi	6	1,21	3,322	6
U.P.	28	7,76	12,102	30
Madras	73	16,30	7,976	59
Travancore	2	18	310	0.2
Mysore	8	1,62	2,877	11
Pondicherry	3	83	1,980	6
Pakistan	14	1,67	4,603	10

(a) In thousands.

The following table gives the production data during recent years:—

Year	Quantity of yarn spun	Quantity of woven goods produced
1938-39	1,303 m. lbs.	4,269 m. yds.
1939-40	1,235 „ „	4,012 „ „
1940-41	1,349 „ „	4,269 „ „
1941-42	1,577 „ „	4,494 „ „
1942-43	1,535 „ „	4,109 „ „
1943-44	1,680 „ „	4,870 „ „
1944-45	1,650 „ „	4,726 „ „
1945-46	1,600 „ „ (estimated)	4,700 „ „ (estimated)
1946-47	—	3,800 m. yds.

That there is an urgent necessity of planning the location of the industry is illustrated by the fact that the cotton mill industry has an inherent tendency to be attracted towards the markets, rather than towards the sources of raw materials. The industry is therefore capable of considerable dispersal between regions. At present there is over-concentration of the industry in the Bombay Presidency and an unequal distribution of industries in general among the different provinces. A planned industrialization should aim at locating further expansion of the industry in regions which have at present a small share of it. It has been pointed out that out of 382 major production units in Cotton Textiles, 201 are located in the Bombay Presidency alone and 80 units in the South Deficit zone and only 2 in Bihar.

Problems of the Indian Cotton Industry :—With the cessation of the war, the industry has entered upon a new era of expansion. With the production capacity of the world impaired, a serious competitor like Japan being absent at least for a few years hence, and an overall shortage of cloth in the world, the Indian Cotton Mill industry has a bright and splendid future before it. It should strive to retain the foreign markets captured during the war and formerly supplied by Japan and has unlimited scope for expansion in the domestic market. It enters the new era with a sound financial position, good reserve funds accumulated as compulsory deposits of excess profits, a well-established home and foreign market. Although the war proved a boon, the expansion of the industry was achieved at the cost of heavy depreciation of the machinery and technical equipment. It therefore lacks in efficient technological and technical equipment. The Indian industry is deficient in technological and mechanical equipment, skilled labour, research laboratories, up-to-date knowledge of latest developments in textile technology made in U. K. and U. S. A., the most important post-war competitors of the Indian Textile industry and the trade research organization for conducting market and consumer researches. The industry made great progress in the production of finer varieties of cloth and higher counts of yarn after World War I. The production of yarn above 40s. rose from 4 million lbs. in 1919-20 to 15 million lbs. in 1929-30 and 82 million lbs. in 1939-40. Regarding varieties of cloth and fancy weaves, from the very coarse heavy-sized long cloths, dhotis and saris, the mills were turning out before the second

World War superior shirtings, long cloths, fine and medium quality dhotis and saris, printed and dyed goods, mercerized fabrics and larger varieties with the aid of dobbies, jacquards and multiple boxloobs. It may be observed that many combing, dyeing, bleaching and finishing, mercerizing and printing plants had been installed for the purpose. There were 105 cotton mills equipped with dyeing, bleaching and finishing departments, 61 mills with combing plants, 17 mills with mercerizing plants and 21 mills with printing plants. Thus, the trend of textile production has been moving slowly and steadily towards lighter and finer varieties with colours and fancy weaves especially in Bombay, Ahmedabad, etc. The installation of up-to-date and modern plant and equipment has therefore become essential if the industry is to maintain the prevailing level of production with a contented labour force.

India depends on foreign countries for her textile machinery, principally U. K. and U. S. A. England is at present unable to meet India's demand for machineries and American supplies are bound to be limited by an acute shortage of dollars. It is therefore fundamentally important that India makes an earnest effort to build up an efficient textile machinery-making industry. Little progress has been hitherto attained in this direction. One or two such industries are not making much headway and the Government should pay attention to this aspect of India's industrial development.

Although the technological laboratory of the Indian Central Cotton Committee has done very useful work during the last 23 years, there is no centralized research organization in the country. The technical education imparted at present has been very little influenced so far by the researches at the technological laboratory of the Indian Central Cotton Committee and the Chemical Technological Laboratory at Bombay University. Technical education in England and America is being constantly influenced by organised scientific researches on fibres and machinery. Training in textile technology in India is only concerned with the handling of raw materials to be treated by the various processes and machines but not with scientific investigation on the raw materials. It is necessary to evolve the second line of technical education and plan textile research organisations for conducting research. In order to advance textile research, establish co-ordination between the industry and research, spread technical education among the

workers, establish an institute of technology for higher technical education, develop the manufacture of indigenous subsidiary textile industries and look after export trade, it is necessary to establish a textile research organisation on the lines of the British Cotton Industry Research Association.

The following figures of imports and exports of Cotton Textiles are given :—

IMPORTS (Rs.)

1945-46	1946-47	1947-48
1,86,72,690	4,09,68,526	9,44,50,729

EXPORTS (Rs.)

33,90,04,746	27,71,79,396	20,51,77,496

Pakistan :—Out of the total of 422 mills in undivided India, only 14 mills are located in Pakistan. Of the 14 mills in Pakistan, 9 mills are situated in East Bengal, 4 in West Punjab and 1 in Sind. The following table gives the relative position of the cotton mill industry in the Indian Union and Pakistan :

	Indian Union	Pakistan
Paid-up capital (Rs. in crores)	73.02	1.92
Spindles: Mule	3,42,456	5,200
Ring	99,23,385	1,62,024
Total	1,02,65,841	1,67,224
Spindles working	94,29,138	1,51,089
Number of looms	1,97,469	4,603
Cotton consumed (in candies of 784 lbs.)	21,00,085	41,402
Workers	4,66,477	9,668

The Indian Jute Industry :—The first recorded instance of jute fibre being sent out of India is the despatch of a sample by the Board of Trade in Bengal in 1791. At this time, the Directors of the East India Company instructed their officers to investigate into the suitability of indigenous fibre for the manufacture of rope for their ships and from 1792 onwards it is recorded that small consignments of jute along with Indian flax and hemp were sent to London. About 65 tons of jute fibre were exported in 1796-97.

Other consignments followed and were largely used for the manufacture of ropes, twine and door mats. Jute was for the first time spun into yarn in England in 1820 at Abingdon in Oxfordshire and used in the manufacture of carpets. Two years later a consignment reached Dundee which was then the centre of flax industry in Scotland, but the flax spinners were unable to make satisfactory use of it and after unsuccessful experiments extending over three or four years, the rest of the consignment was utilised for making ropes. Dundee flax spinners however continued to experiment with the mixing of jute with flax. The flax crop failed in 1835 and adulteration with jute became so common that it was published in the press.

The first power-driven mill for spinning jute yarns in India was erected by George Aucland in 1855 at Rishra on the Hooghly, about 12 miles from Calcutta. At first it consisted of only 48 spindles but later it was expanded to produce about 8 tons per day. Subsequently weaving machinery was added and the first power-loom factory was established at Barnagore in 1859 by the Borneo Company. It consisted of 192 looms with the necessary preparing and spinning machinery.

The expansion of the industry continued uninterrupted and with the formation of the Indian Jute Mills Association, there was a rapid growth. There were 95 mills in India in 1928, equipped with 50,000 looms and 1,000,000 spindles and employing over 300,000 workers. The development of the industry is illustrated by the following table:—

Year	Mills (number)	Looms (number)	Spindles (number)	Year	Mills (number)	Looms (number)	Spindles (number)
1914	70	38,379	795,528	1927	93	52,221	1,105,634
1915	70	39,890	812,421	1928	95	52,409	1,108,147
1916	74	39,697	824,315	1929	98	53,900	1,140,435
1917	76	40,639	834,055	1930	100	61,834	1,224,982
1918	76	40,043	839,919	1931	103	61,426	1,220,586
1919	76	41,045	856,307	1932	99	60,506	1,202,183
1920	77	41,588	869,879	1933	99	59,501	1,194,405
1921	81	43,025	908,359	1934	100	61,387	1,221,786
1922	86	47,528	1,003,179	1935	104	63,724	1,279,416
1923	89	49,038	1,043,417	1936	104	65,273	1,300,077
1924	90	50,359	1,067,633	1937	105	66,705	1,337,958
1925	90	50,503	1,063,700	1938	105	66,705	1,337,958
1926	93	51,061	1,083,816	1939	107	67,939	1,350,466

Location and Development :—The industry is located mainly in West Bengal. The other centres of the industry are United Provinces, Bihar, South India and the Eastern States Agency. The mills outside West Bengal were established after 1919. The total number of jute mills in India in 1944 was 112 out of which 101 were in West Bengal.

There was a great increase in the productive capacity of the Indian jute mill industry from 1900 to 1909 and by 1909 there were 38 companies with over 30,000 looms. In the post-war period, there was again a rapid increase and by 1927, the loom strength reached the 50,000 mark. The economic depression during the thirties adversely affected the jute mill industry, which showed little signs of revival until the outbreak of the Second World War. The total number of jute mills reached 108 by 1939, the number of looms being over 65,000.

The Indian jute mills consume over two-thirds of the raw jute produced in India and Pakistan. The number of persons employed in the industry was nearly 3,00,000 in 1943-44. In 1941-42 jute and jute manufactures accounted for nearly 50 per cent of the value of the export trade of Bengal and about 25 per cent of the value of the export trade of British India. The capital invested in the industry was about Rs. 240 millions in 1939-40. The management of the industry is mainly in the hands of foreigners, although in recent years there has been a tendency on the part of Indian industrialists to own jute mills.

It may be observed here that as the mill industry progressed, the handloom industry declined and it was not until the eighties of the last century that handloom jute fabrics disappeared from the annual statistics of the export trade. These handloom products were shipped to Great Britain, France, Germany, North and South America, Burma, Java, China, Australia and Africa.

The World War I imparted a great stimulus to the Indian jute industry, when huge orders were placed for sand bags, sacks and bags of all kinds for the transport of foodstuff and other materials. The industry prospered equally during the World War II by obtaining large orders for jute bags and other articles like canvas, camouflage cloth, etc.

Manufactures :—At the outbreak of World War II, the U.S.A. was India's best customer for manufactured jute goods and she

took about 60 per cent in volume of the annual exports of hessian cloth or about thirty per cent of the total exports of jute manufactures of all kinds. The Argentine Republic was the next largest customer for hessian cloth, but it imported about one-third of the U. S. A. The United Kingdom takes about 10 per cent of the exports of hessian cloth; Canada, Australia, the Philippines and the Straits Settlements are also good customers. The United Kingdom is the principal customer for hessian bags, and takes about thirty per cent of the exports. The Indo-China and Malayan countries are good customers for heavy bags.

The production of jute manufactures dropped in 1942 due to the scarcity of coal and the Government requisitioning of some mills for military use and the Indian Jute Mills Association evolved a scheme of rationalization from July, 1944, according to which "an industrial pool was to be constituted and the electrically driven mills and those steam-driven ones which are still in production will pay to this pool, at rates determined from time to time, a cess per loom hour worked. The Government will also pay into this pool compensation for mills requisitioned by them. Out of the funds so collected, compensation will be paid to labourers who have become idle, because of stoppage of work. The idle labourers will be paid at the rate of Rs. 3 per week plus an amenity allowance of Rs. 1-4 and in addition to this, the mills will be paid the cost of subsidy of food-stuffs provided to these labourers. A money compensation per loom-hour will be paid to mills which have been entirely closed down or which are unable to work their full quota of loom-hours because of coal shortage".

The Government of India set up the Technological Research Laboratories of the Indian Central Jute Committee for research work in connection with new uses for jute. Investigations were carried out in the past on the jute sticks for alpha-cellulose or for any other chemicals that they might yield. The Forest Research Institute, Dehra Dun, has been entrusted with the task of discovering various uses of jute wastes.

The manufacture of knitted scarves, jerseys, blankets and tapestry from jute ranks among the new uses for this commodity. It has been found that gunnies may be used as good substitutes for bamboo baskets and earthenware for purposes of transport

and storage. Attempts may also be made to manufacture tea chests and cases for transporting eggs.

The Indian Jute Mills Association proposes to set up a new institution called the School of Jute Technology, to be run in conjunction with the University of Calcutta for training Indian students for the higher supervisory posts in the industry, which are now filled by personnel from Dundee.

Formerly jute mills concentrated on the manufacture of standard sizes of hessian cloth and standard makes of bags, but lately increasing attention is being paid to the manufacture of canvas, linoleum, hessian, webbing, felting etc. and a union canvas made of cotton warp and jute weft. The Research Department of the Indian Jute Mills Association has successfully tackled problems like the manufacture of rot-proofing, water-proofing, etc.

STATEMENT OF THE QUANTITY AND DESCRIPTION OF JUTE MANUFACTURES PRODUCED IN INDIA

Description		Twelve months, April to March	
		1947-48	1946-47
Twist and tons yarn ...	...	52,492	57,044
Hessian and canvas, including bags and cloth	yds. ...	471,592	437,898
	tons ...	1,835,290,603	1,672,946,720
Sacking including bags and cloth	tons ...	534,181	559,614
	yds. ...	1,264,838,735	1,346,248,874
Other manufactures tons ...	...	4,564	4,693
TOTAL ...	tons ...	1,062,829	1,059,249
	yds. ...	3,100,129,338	3,019,195,594

The following statistics relating to the number of mills, looms, spindles, hands employed are reproduced—

(a) Total number of working looms in the mills in Jan.	1947	56,201
Do. do. do. do. do. ...	1946	54,233
Do. do. do. do. do. ...	1945	55,729
(b) Total number of spindles at work in January ...	1947	11,15,002
Do. do. do. do. do. ...	1946	10,89,763
Do. do. do. do. do. ...	1945	11,11,429
(c) Average daily number of hands employed during	1946	2,89,855
Do. do. do. do. do. ...	1945	2,96,382
Do. do. do. do. do. ...	1944	2,77,289

Prospects of the Indian Jute Industry :—The prospects of the jute industry appear to be rather uncertain under the present economic set-up. An erstwhile prosperous and financially solvent industry has been faced with problems of serious proportions. In addition to the difficulties of the supplies of raw jute, following the division of the country which have made the Indian mills dependent upon precarious Pakistan supplies, increased costs of production due to higher wages, replacement costs, etc. have made the position of Indian mills extremely difficult. High prices of jute goods owing mainly to prohibitive prices of raw jute have rendered the foreign buyers shy and they are fast switching on to substitutes. Paper and other packing materials are replacing jute in foreign countries at an alarming rate. Pakistan has no jute mill and it will take her a good many years to build jute mills. Meanwhile Pakistan should take proper steps to see that Indian mills which are her best customers are provided with sufficient supplies of raw jute at a reasonable price. Raw jute is the life-blood of Pakistan economy and if it loses its economic importance it will spell disaster for Pakistan. India should at the same time make best endeavours to step up the cultivation of raw jute within her borders. The Indian jute industry occupies a vitally important place in India's economy and an all-out effort should be made to keep this prosperous industry unimpaired in the interest of the nation.

Exports of Jute Manufactures :—Jute products form the principal item in India's export trade and in consequence the main source of foreign exchange earner. The following statistics of exports are reproduced.

EXPORTS OF JUTE MANUFACTURES

	1945-46	1946-47	1947-48
Quantity (Tons)	680,243	732,925	872,077
Value (Rs.) ...	59,62,29,234	70,07,05,176	1,27,82,09,589

The Indian Iron and Steel Industry :—Early attempts to manufacture pig-iron and steel under modern methods were tried in South Arcot district in 1830, but they failed. The Burrakur

Iron Works were started around the Jherria coalfields in 1874 and were acquired by the Bengal Iron and Steel Company in 1889. It produced about 35,000 tons of pig-iron in 1900 and it tried without success to produce steel.

The Tata Iron and Steel Company was established in 1907 at Sakchi in the Singbhum district under the initiative of late J. N. Tata. Pig-iron was produced in December, 1911 and steel in 1913 for the first time in India under modern process. The World War I imparted a great fillip to this unit, which went in for large expansion in 1917. The new plant thus installed began to manufacture from 1926 rails, heavy structurals, light rails, fish plates, etc.

Inspired by the success of Tatas, the Indian Iron and Steel Company was formed by Burn & Co. in 1908 at Hirapur near Asansol. The Mysore State Iron Works were started in 1923 with blast furnaces fired by charcoal.

The Indian iron and steel industry has been making steady progress since then under protection. The production of pig-iron rose from 35,000 tons in 1900 to 162,282 tons in 1914, 232,268 tons in 1919, 1,376,000 tons in 1929-30 and 1,576,000 tons in 1938-39. Japan took 514,000 tons of pig-iron from India in 1938-39 and United States of America also buys Indian pig-iron. The production of steel increased from 139,433 tons in 1916-17 to 599,565 tons in 1927-28 and of finished steel from 98,726 tons to 428,654 tons during the same period. The production of steel ingots was shown at 977,000 tons and finished steel 726,000 tons in 1938-39.

The Indian iron and steel industry experienced boom conditions during World War II, following large Government, Railways and overseas orders. The rapid extension of ordnance factories and engineering works has been making large demands upon Indian iron and steel. The production of pig-iron in consequence rose to 1,835,000 tons, steel ingots 1,067,000 tons and finished steel 1,062,900 tons in 1939.

The Tata works have lately installed new plants for the manufacture of wheels, tyres, axles, etc. Extensive programmes of expansion have been undertaken by the Steel Corporation of Bengal, which was initiated by Burn & Co. in 1937.

Protection to the Indian Iron and Steel Industry:—The Government appointed the Tariff Board in 1923 to investigate into the claims of the Indian iron and steel industry to protection. The Board held that the industry satisfied all the conditions laid down by the Fiscal Commission. India possesses great natural advantages for the manufacture of steel owing to the richness and abundance of iron ore deposits in the Singhbhum and Orissa iron belts and the comparatively short distance which separates them from the coal-fields. Other raw materials, e.g., limestone, manganese, and materials for refractory bricks, exist in India in abundance. The industry also possesses the advantages of a large and expanding home market. Regarding labour, however, 'India suffers under a disadvantage inevitable in any country mainly agricultural, and where industrial experience and training has still to be acquired', and it has become necessary to import at present skilled supervisors from America and Europe. This is, however, a temporary handicap which will eventually disappear. The Board held that, unless protection was given, there was no hope of the industry developing for many years to come, and there was a serious danger that it might cease altogether. The Board agreed that it was also an essential industry for military purposes, and was, therefore, especially entitled to protection. The burden on the consumer was expected to be temporary and widely diffused. Accordingly, the Steel Protection Bill was passed in 1924, which levied higher duties on certain articles manufactured from steel, and bounties (amounting to about Rs. 242 lakhs during 1924-7) were granted on heavy steel rails, fish-plates and railway wagons manufactured in India. Bounties and duties alike were subject to revision at the expiry of the period.

The Steel Protection Act of 1924 was due to expire on 31st March, 1927 and so the Tariff Board examined the position of the industry in 1926 and recommended the continuance of protection for a further period of seven years on certain lines. The industry was to receive protection in form of increased duties on import and not by bounties on production and a fresh inquiry was to be made at the end of the period to ascertain what kind and amount of protection might still be necessary. Accordingly, a Bill which was introduced in 1927, came into force on 1st April, 1927. It provided for the imposition of different rates on certain iron and

steel articles, with a basic duty on articles of British manufacture and an additional duty on products of non-British origin..

The Indian Tariff (Ottawa Trade Agreement) Amendment Act, 1932, which came into force from 1st January 1933, gave effect to the tariff changes necessitated by the trade agreement made by the Government of India and His Majesty's Government in United Kingdom at the Ottawa Conference held during July and August 1932 and the supplementary agreement regarding iron and steel in the month of September following. Regarding iron and steel goods, the preference extended only to those commodities which were not subject to the protective duties. The supplementary agreement provided for the adjustment of the Indian import duty on galvanised sheets in the following way:—Rs. 30 per ton on sheet made in United Kingdom from Indian sheet bar; Rs. 53 per ton on sheet made in United Kingdom from other sheet bar; Rs. 83 per ton on sheet not made in United Kingdom. The period of operation of the protective duties imposed by the Act of 1927 was extended up to 31st October 1934. Meanwhile, according to the Steel Industry (Protection) Act, 1927 the question of the renewal of protection was reviewed by the Tariff Board. The Iron and Steel Duties Act, 1934, gave effect on and from 1st November 1934 to the protective measures recommended by the Board. In order to compensate the loss of revenue following a considerable reduction in import duties in certain important cases, it was found necessary to impose as a revenue measure an excise duty of Rs. 4 per ton on the production of steel ingots in British India and a countervailing customs duty on steel ingots. This countervailing duty was in addition to the protective duties recommended by the Board and alternative to the ad valorem revenue duties on articles regarding which protection had not been proposed. The supplementary agreement expired in 1934.

Subsidiary Industries :—Additional measures of protection had to be undertaken in order to protect the interests of those subsidiary industries which utilised steel as their raw material. An increase in the price of steel due to protection was likely to be detrimental to many branches of the engineering industry. The Tariff Board therefore made certain recommendations to meet this aspect of protection to steel. The engineering industry was in consequence protected by higher duties on imported fabricated steel with certain exceptions.

The following table gives a statement of the quantity and description of iron and steel manufactures produced in India.—

	Description.		Twelve months April to March	
			1947-48 Tons	1946-47 Tons
I	Pig Iron	...	1,525,217	1,427,744
II	Iron Castings and Manufactures	...	128,912	117,913
III	Steel Ingots	...	1,213,433	1,212,004
IV	Semis ...	..	887,017	904,693
V	Finished Steel	...	817,905	860,860

The following figures of imports and exports of iron and steel are given:—

IMPORTS OF IRON AND STEEL

		1945-46	1946-47	1947-48
Quantity (in tons)	..	112,329	65,075	94,510
Value (in Rs.)	..	5,12,62,972	4,15,98,508	8,04,29,715

EXPORTS OF IRON AND STEEL

		1945-46	1946-47	1947-48
Quantity (in tons)	..	1,030	8,301	3,401
Value (in Rs.)	..	6,68,767	32,60,795	12,99,636

The Paper Industry:—The manufacture of paper on modern lines dates from 1870 with the establishment of the Bally Mills on the Hooghly, which is even now the chief centre of the industry. The Titaghur Paper Mills were established in 1882 and absorbed in 1903 the Imperial Paper Mill, which was started at Kankinara in 1892-94. The Bally Mills were liquidated in 1905. The Indian Paper Pulp Company, which was formed in 1918 for the production of pulp and paper from bamboo started the manufacture of paper in the Naihati Mill from 1922. In upcountry, the

Upper India Paper Mill was established at Lucknow in 1879. The Deccan Paper Mill Company was formed in 1885 and began work at Poona in 1887. The Bengal Paper Mill Company was formed in 1889 at Raniganj and started working in 1891. There are two small paper mills at Bombay and one at Punalur in the Travancore State. In 1927-8, Carnatic Paper Mills began working at Rajahmundry for manufacturing paper from paddy, straw and bamboo. The Punjab Mills Company obtained a large concession regarding sabai grass in Punjab for its factory near Saharanpur. A new company has been formed in Assam and a factory for manufacturing paper pulp from bamboos has been opened at Chittagong. The Indian production of paper amounted to 1,184,000 cwt. in 1938-9, compared with 804,000 cwt. in 1932-3. In the same year there were altogether eleven paper mills in India, namely four each in Bengal and Bombay, and one each in United Provinces, Madras and Travancore. Two new paper mills were started in 1938-9. The paper production in India amounted to 1,416,267 cwt. in 1939-40 and the upward production trend is likely to continue as long as paper-producing countries of Europe are not able to supply fully the Indian market. Several paper manufacturing concerns were floated during 1939.

Protection to the Indian Paper Industry :—The Tariff Board was asked to investigate the claims to protection made on behalf of the paper and paper pulp industry in April 1924. The Board expressed a hope that the manufacture of paper pulp and paper from bamboo could be successfully developed in India. They recommended a protective duty of 1 anna per lb. for five years on certain classes of writing and printing paper competing with Indian paper.

The Bamboo Paper Industry (Protection) Act was passed in 1925, providing for the levy of a protective duty of 1 anna per lb. for seven years until 31st March, 1932. The Bamboo Paper Industry (Protection) Act of 1932 renewed the protective duty up to 31st March, 1939 as recommended by the Tariff Board. The Board also found that substantial progress had been made in developing the bamboo paper industry, abundant supplies of raw material were available at lower prices than in 1925 and the cost of production in Indian mills had been much reduced during the period of protection. The same Act levied a new protective

duty of Rs. 45 per ton on imported wood pulp in order to stimulate the manufacture and use of bamboo pulp. The Tariff Board again investigated the question of the continuance of protection in 1937-38. The Government of India decided to continue protection to the industry but at a lower rate than recommended by the Board, and accordingly the Indian Tariff (Second Amendment) Act of 1939 was passed. The period of protection granted was fixed at three years instead of seven. The duty on wood pulp was fixed at Rs. 30 per ton or 25 per cent ad valorem, whichever was higher. The protective duty on paper was fixed at 9 pies instead of 11 pies per lb. The protection led to a phenomenal expansion of the industry. There are now 16 paper mills operating 32 machines with an annual production of about 100,000 tons. The protective tariff was withdrawn in 1947, as the industry no longer required protection.

The Indian paper industry is at present faced with great difficulties, following the partition of the country as they obtain a large supply of raw materials from Eastern Pakistan. The Indian mills should explore the possibilities of obtaining their raw materials from India, which also offers vast scope in this direction.

The following table gives a statement of the quantity and description of paper manufactured in India:—

	Twelve months, April to March	
	1947-48 cwts.	1946-47 cwts.
White and unbleached printing other than News printing ..	593,536	665,611
Coloured printing other than News printing	25,986	23,630
Writing paper and Envelopes ..	207,973	278,384
Manilla	15,321	19,620
Badami	111,091	103,752
Packing papers	309,586	307,399
Pulp boards	175,067	162,540
Blotting	5,597	5,819
Other kinds	271,181	312,068
TOTAL ..	1,715,358	1,878,823

The following statistics of imports of paper, pasteboard and paper-making materials are reproduced:—

IMPORTS OF PAPER AND PASTEBOARD

	1945-46	1946-47	1947-48
Quantity (in cwts.) ..	1,097,982	1,681,845	2,254,011
Value (in Rs.) ..	4,51,14,190	7,27,34,993	10,69,45,697

IMPORTS OF PAPER-MAKING MATERIALS

	1945-46	1946-47	1947-48
Quantity (in cwts.) ..	113,945	112,583	106,735
Value (in Rs.) ..	24,01,508	23,14,305	44,16,110

The Leather and Tanning Industry :—Although India possesses large supplies of hides and skins, there has not developed any important tanning industry in the country. A large part of hides and skins is exported abroad.

There existed a considerable indigenous tanning industry in the country from early times and locally available tanning materials are largely used for curing and tanning hides. The European methods of tanning were first introduced by the military authorities in order to manufacture superior leather suitable for harness and other military requirements and tanneries usually followed the establishment of arsenals. A notable step in production was taken in 1860 when the Government Harness and Saddlery Factory was set up at Kanpur. Shortly afterwards, Allen and Cooper established the Army Boot and Equipment Factory and received financial assistance from the Government. Adamjee Peerbhoy started the Western India Army and Equipment Factory at Sion in Bombay. Factories were also established at various other centres and the production of finished goods was attempted. The use of machinery is generally absent in Indian tanneries, except in the Kanpur and Sion factories and the Madras Tannery, which produce the bulk of the half-tanned leather and skins, forming principal items of exports. As Madras possesses a large number of tanneries, India's export trade in hides and skins is in consequence chiefly confined to the South.

The tanning and leather industry showed a remarkable expansion during World War I. The Indian Munitions Board attempted to step up and regulate the production of those kinds of leather

which possessed a special value as war material. There was in consequence a large increase in the production of the rough-tanned cow-hides, known as the East India tanned kips, from the Madras and Bombay tanneries. The utility of such kips for making the 'uppers' for the army boots was realised during the war and the Government assumed full control of the trade and they bought in India the entire supply for exporting directly to the British War Office. About 194,763 cwts. of tanned hides valued at Rs.1·75 crores were exported in 1913 and 361,674 cwts. valued at Rs.4·86 crores in 1917-18. In addition to the export trade in East India kips, Indian tanneries produced during the war period large quantities of leather of all categories and boots for the army.

The chrome process of tanning which enables superior leather to be produced made very slow progress in India. The Government of Madras rendered valuable pioneering work from 1903 to 1911 to demonstrate that chrome tanning could be successfully introduced in India, although the Government subsequently had to sell the factory, following protests from the Upper India and Madras Chambers of Commerce. The industry made rapid progress after World War II and Indian chrome leather hides found a profitable market in Great Britain. The development of chrome tanning in India is encountering several difficulties, *e.g.*, the highly technical processes requiring chemical knowledge and costly mechanical equipment are lacking in this country. As a large proportion of Indian cow-hides and goatskins is eminently suited to this class of work, promising developments are anticipated under the guidance of the expert tanner, appointed by the Government for the development of the tanning industry. The Industrial Research Bureau made an industrial survey of the Indian tanning industry in 1939 in order to improve the standard of tanning technique and thereby help in development of an export trade of finished leather of good quality.

The Indian tanning industry expanded during World War I under Government patronage and in order to maintain its progress the Indian Tariff Act of 1894 was amended in 1919, which imposed an export duty of 15 per cent on hides and skins with a rebate of 10 per cent on hides and skins exported to other parts of the Empire and actually tanned there as a measure of protection to the Indian tanning industry. As the Indian tanneries could

deal only with a small proportion of the total supply of hides and skins in the country, the rebate was defended as a measure of assistance to the tanning industry within the Empire. The experiment, however, failed to achieve either of the objectives. The Fiscal Commission condemned the duty as wrong in principle, because if protection was needed, it should have been given through an import and not an export duty. The Government of India therefore reduced the rate to 5 per cent and abolished the 10 per cent rebate in 1923, the 5 per cent duty being retained for purposes of revenue. The majority of the Taxation Inquiry Committee, however, agreeing with the Fiscal Commission recommended its early abolition, although the Taxation Committee suggested the retention of the duty on skins, which enjoy a good reputation in the world market and were not likely to be affected by the duty.

The 5 per cent export duty on raw hides was abolished by the Finance Act of 1934, following the decline in the export trade in raw hides with Germany, while the export duty on raw skins was abolished by the Finance Act of 1935 in order to help the revival of the export trade of India.

The Indian tanning industry is full of potentialities and should be actively encouraged. It ought to be properly organised and the necessary technical personnel may be obtained if required from abroad.

The following statistics of imports and exports of dressed and tanned hides and skins are reproduced:—

TANNED HIDES

Imports:—

	1945-46	1946-47	1947-48
Quantity (tons)	23	42	63
Value (Rs.) ..	67,554	1,21,320	2,18,291

TANNED SKINS

Quantity (tons)	...	9	1
Value (Rs.) ..	5,088	2,54,986	1,34,178

TANNED HIDES AND SKINS

Exports:—

	1945-46	1946-47	1947-48
Quantity (tons)	10,568	24,511	19,014
Value (Rs.) ..	6,34,87,718	17,97,06,585	13,74,57,609

The Chemical Industry :—It has been recognised that there are certain fundamental heavy chemicals, namely, sulphuric and hydrochloric acids, limes, caustic soda, sodium carbonate, nitric acid, etc., which are essential for the development of a full-fledged chemical industry. These heavy chemicals are utilised in the production of other chemicals from indigenous sources and also for refining the various natural products derived from such produce. Large quantities of sulphuric acid and alkali are necessary for refining fixed and mineral oils.

The Indian chemical industry has been making progress since World War I, but it is insufficient to meet the requirements of the country. Although chemicals derived from sulphuric acid have been manufactured, no serious attempt was made until recently to produce alkalis. Recently the Imperial Chemical Industries and the Tatas have started one company each for the manufacture of soda ash, caustic soda and other allied chemicals. As India possesses ample raw materials for the production of heavy chemicals, it is necessary to concentrate attention upon the development aspect of this sector of our industries.

Protection to the Indian Heavy Chemical Industry :—

The question of protection to heavy chemical industries was referred to the Tariff Board in July, 1928. The Board concluded that the claim of the chemical industry for protection rested primarily on its supreme national importance. It was a key industry whose products were utilised in almost all industries. It was necessary for national defence and provided the basis for chemical researches in industries and agriculture. The industry substantially fulfilled the conditions laid down by the Fiscal Commission and had made out a case for protection, which was to be given generally in the form of specific duties. At the expiration of a period of seven years of protection, a fresh inquiry was to be held as in the case of the steel industry. A bounty was to be granted for the manufacture of superphosphate which is used as an artificial fertilizer. The Board also recommended the reduction of railway freights in order to encourage the growth of a large-scale chemical industry in India. The Heavy Chemical Industry (Protection) Act, 1931, gave effect to some of the recommendations of the Tariff Board. It removed magnesium chloride from the free list and levied on this and certain other heavy chemicals protective duties at various

rates. These duties were to remain in force till 31st March, 1933 except in the case of magnesium chloride. The protective duty on the latter was to remain in force up to 31st March, 1939, and could be increased if required. The duties imposed by the Act expired on 31st March, 1933 with the exception of the duty on magnesium chloride. The question of continuance of protection was again referred to the Tariff Board in December, 1937. The Board recommended the continuance of protection in order to safeguard the industry against foreign competition, especially, dumping from Japan. Protection at a lower rate, *e.g.*, twelve annas instead of fifteen anas per cwt. recommended by the Board, was provided for by the Indian Tariff Amendment Act of 1939. The period of protection was extended to 31st. March, 1946.

The following table gives a statement of the quantity and description of certain heavy chemicals produced in India:—

Description	Twelve months, April to March	
	1947-48	1946-47
Hydrochloric Acid (a)—		
(*i*) Ordinary or non-fuming (cwts.) ...	11,395	15,794
Nitric Acid (a)—		
(*i*) Ordinary or non-fuming (cwts.) ...	10,859	14,146
Sulphuric Acid (a)—		
(*i*) Ordinary or non-fuming (cwts.) ...	714,188	802,745
Alum (b) (cwts.)	20,212	39,731
Aluminium Sulphate (c) (cwts.)	166,688	145,016
Aluminium Sulphate—		
(*i*) Neutral (tons)	21,515	21,596
(*ii*) Acid (tons)	94	...
Ferrous Sulphate (cwts.)	63,146	61,257
Magnesium Sulphate (Epsom Salt) (cwts.) ...	40,398	67,937
Sodium Sulphate (Glouber's Salt) (cwts.) ...	11,027	30,835

(a) Figures represent production in 100 per cent. concentration.

(b) By alum is meant double salts containing aluminium sulphate, such as potassium aluminium sulphate and ammonium aluminium sulphate.

(c) All forms of aluminium sulphate itself whether called alum cakes, alumino ferric or sulphate of alumina are included under aluminium sulphate.

The following figures of imports of chemicals are given:—

(In Rs.)

1945-46	1946-47	1947-48
6,05,57,987	7,40,15,296	9,28,53,879

The Cement Industry :—The manufacture of Portland cement began in Madras in 1904 on a limited scale. Three companies were formed in 1912-13. The manufacture was first undertaken by the Indian Cement Company at Porbundar (Kathiawar), followed by the Katni Cement and Industrial Company (Central Provinces) and the Bundi Portland Cement Company (Rajputana). Subsequently the industry developed especially under the patronage of the Government who bought large quantities during World War I. As the industry was then extremely profitable, a number of companies were floated during the post-war period. The older companies doubled their output and six new companies began working from 1923. The industry developed rapidly and the aggregate production increased from 945 tons in 1914 to 236,746 tons in 1924. India thus became nearly self-supporting in matters of cement. The production of cement in India amounted to 593,000 tons in 1932-3, which was nearly doubled in 1937-38. The quality of Indian cement is not inferior compared to the British product, and it competes on equal terms with the continental cement. The formation of an effective combine known as the Associated Cement Companies of India, Ltd., in 1936 was a landmark in the history of the industry and by this remarkable merger of the ten principal concerns, the technical and commercial organisation of the industry has substantially improved.

The claim of the industry to protection was referred to the Tariff Board in April, 1924, but it declined to recommend protection to the industry on the ground that it was suffering from over-production and prices were determined by internal competition amongst the Indian manufacturers and not by imports. In order to remove the handicap to which the Indian cement was subject owing to the great distance of most of the factories from the coal-fields or the ports, the Board recommended that legislation should be introduced authorizing the Government to pay bounties on cement consigned from Indian factories to certain ports or to railway stations within a specified radius of these ports, provided the payment of bounties did not lead to a reduction in the price of Indian cement in relation to the price of imported cement. The Government of India thought it wise not to introduce any such conditional legislation. Imports of cement aggregated Rs. 13,32,501 in 1947-48 compared with Rs. 10,66,639 in the previous year.

Below is given a statement of the quantity of cement produced in India:—

Description	Twelve months, April to March 1947-48	1946-47
	Tons	Tons
Portland Cement	1,635,773	2,027,238

The Match Industry:—There was no large-scale manufacture of matches in India until 1921, except the Gujarat Islam Match Factory which started on a successful career from 1895. There has been considerable expansion in recent years in consequence of the imposition of an import duty on matches of Rs. 1-8 per gross, or more than 100 per cent ad valorem in 1922 for purposes of revenue. The industry has a large home market, consumption being estimated at about seventeen million gross per year. The gigantic Swedish combine, which controls about seventy per cent of the total world's demand, started match factories in India and there has been considerable agitation by the Indian match manufacturers regarding the adverse repercussions on the indigenous industry due to this big foreign enterprise. Regarding the claim to protection, the Tariff Board held in 1928 that the prices of Indian matches were cheap and regulated by internal competition. It also found that the industry would be able to resist world competition without the assistance of the State. It however recommended that the current revenue import duty of Rs. 1-8 per gross should be converted into a protective duty for an indefinite period in order to give assurance to the industry that it would not be suddenly deprived of the protection it has been enjoying so far. It did not favour any measures for the time being to safeguard Indian interests against the Swedish Match Company in India and it found that the company had been doing useful work for the expansion of the industry in India. The Board advised the Swedish Match Company to adapt itself to Indian nationalist and political sentiments by reconstructing itself with a rupee capital and admitting Indian directors. It also acknowledged the necessity of keeping a watch on the company to see that it did not establish a monopoly in India.

The Assembly passed the Match Industry Protection Bill in September, 1928 as recommended by the Tariff Board, levying a duty of Rs. 1-8 on a gross of boxes, each containing 100 matches. A duty of 4½ annas was imposed on every pound of undipped splints used for match-making, and of 6 annas per lb. on veneers used in box-making.

The Indian match industry, sheltered by a high tariff has been able to meet India's domestic requirements, and imports of foreign matches are negligible.

The table below gives a statement of the quantity and description of matches manufactured in India:—

	Twelve months, April to March	
	1947-48	1946-47
	Gross	Gross
(*a*) Boxes or Booklets containing on an average—		
(*i*) not more than 40 matches	7,249	274,917
(*ii*) between 41 and 50 matches, both inclusive	21,930,520	15,149,135
(*iii*) between 51 and 60 matches, both inclusive	1,424,666	6,121,992
(*iv*) between 61 and 80 matches, both inclusive	67,754	119,520
(*b*) Boxes containing on an average not more than 12 matches of the type known as "Bengal Lights"		
(*c*) Boxes or Packets containing on an average not more than 20 matches of the type known as "Self-lighting Biris"		
(*d*) All other matches		
TOTAL ...	23,838,958	21,946,599

The Glass Industry :—The Indian glass industry is very old and there are evidences to show that it was an established industry in the sixteenth century, but it used very inferior material for the manufacture of bangles, bottles and flasks. Five glass factories of modern type were established between 1892 and 1893, but they soon closed down. Another unsuccessful attempt was made in 1909 to establish a glass factory in Madras under European management. A number of indigenous factories sprang into existence during the swadeshi movement of 1906-13, but of these

only three were working in 1914. The Talegaon factory in Poona was working with financial aid of the Paisa Fund.

The prevailing Indian industry may be distinguished into two categories, namely, the indigenous cottage (bangle-making) industry and the modern factory industry. Although the indigenous industry is spread all over India, it is chiefly concentrated in the Firozabad district of United Provinces and the Belgaum district in the south. There is a large colony of bangle-makers, and about sixty bangle factories exist in Firozabad.

The factory industry remains as yet undeveloped and its production is mainly confined to the manufacture of lampware, bottles and carboys. The demand of the Munitions Board for specialised glasses during World War I encouraged several factories to manufacture with some success glass tubing, flasks, beakers, Petri dishes and test-tubes. A few works have also been started to meet the demand of scientific laboratories controlled by the Indian Medical Service.

The Indian glass industry has been handicapped in addition to foreign competition by lack of trained personnel and supplies of essential materials like coal and soda ash, sand and lime and by inadequate finance, etc. There were 59 glass factories in 1932, the chief centres being Bombay, Jubbulpore, Allahabad and Naini in the United Provinces, which enjoy enormous advantages over other centres due to the close proximity of raw materials and fuel supplies. Useful work has been done by the Paisa Fund Glassworks at Talegaon in training glass-blowers.

The prospects of the glass industry have been brightened following the appointment of a Glass Technologist by the Government of the United Provinces. Electric lamps, laboratory glass, glass-stoppered bottles, etc., have been manufactured with success. The World War II gave a further impetus to the growth of the industry and two new factories were added in 1939. In response to the representation of the glass manufacturers in India the Government of India referred the claim of the glass industry to protection to the Tariff Board in October, 1931. The Board recommended in 1932 the grant of protection for a period of ten years and outlined proposals for protective duties on sheet and plate glass, bangles, beads, false pearls, glass and glass ware. Meanwhile, it decided to give the glass manufacturing industry a certain measure of

relief by way of a rebate of duty on imported soda ash. This concession was to continue for three years.

India produced 153,450 tons of glass in 1945 from 96 factories.

Imports of glass aggregated Rs. 3,65,45,425 in 1947-48, compared with Rs. 1,46,54,139 during the preceding year.

The Oil-milling Industry :—Although India possesses vast supplies of oil-seeds of various kinds, she has not yet developed on any large-scale the manufacture of refined oils and oil-seed cakes. A large volume of oil-seeds is exported abroad. In India oil-pressing is even to-day largely done by the archaic method of the bullock and the *ghani.* There has been in recent years a great increase in the number of oil-mills worked by steam or other mechanical power, especially in the case of mustard oil, castor oil, and groundnut oil. The World War II gave a fillip to the development of this indigenous industry.

Miscellaneous Industries :—During and after the World War II, India developed a large number of miscellaneous industries, namely textile machine-making, engineering, cable-making, machine tools, tea chests, electricals, films, aluminium, printing, tiles, ship-building, foundries, saw mills, kerosene tinning and packing, tobacco and cigarettes, lac and mica, etc. As India offers a large market for these goods, there is a vast scope for the development of these categories of industries. At present they are handicapped by lack of finance, equipment and technical knowledge, and it is confidently expected that the National Government will provide these industries with requisite help.

The manufacture of textile machinery in India was initiated by Birla Brothers 10 years ago, when the Textile Machinery Corporation was founded (1938) for the purpose of manufacturing all types of cotton textile machineries. The work was however interrupted due to the outbreak of the war, when the Government requisitioned its factory at Belghurriah, 24 Parganas, Bengal. The factory was given back to the owners on 1st December, 1945. The company was well-equipped with plant and machinery and had first-rate technicians on its staff to assist both in the production and planning of new designs. It had already undertaken the production of spindles, and much headway had already been made in the production of spinning frames. Other spinning machinery and important finishing plants had also been

planned and it was expected that by 1948 the company would be able to supply the entire requirements of a mill from its own factory.

Meanwhile its sister concern, Texmaco (Gwalior) Ltd. which during the war, was devoting its attention to the manufacture of looms, was able to turn out about 100 looms per month, but several restrictions hampered the progress of this institution. There was great difficulty in obtaining essential raw materials. And it was not until January 1945, that the manufacture of looms, as distinguished from loom parts, was permitted at all.

The Woollen Mill Industry :—The manufacture of woollen goods has been carried on in India, as a cottage industry for a very long time, but it was only recently that it developed into an organised factory industry. India produces annually about 90 to 100 million pounds of wool, half of which used to be exported for carpets, yarns, coarse blankets and felt. The average production per sheep in India is 2 lbs. as compared to 7½ lbs. in Australia. India therefore lacks in fine varieties of wool for worsted goods, and has to import wool from abroad.

The chief centres of trade in raw wool are the Hissar district in the Punjab, Almora and Nainital in U.P., Sind, Baluchistan, Bikaner, Beawar, Fazilka, Deccan and Khandesh (black), Gujrat, Kathiawar, and Sind (white), Mysore State, Bellary, Kurnool and Coimbatore. In other parts the sheep yields only hair without any felting quality.

The woollen mill industry sprang up in the important hand weaving centres of the North in 1876. The first woollen mill was started at Kanpur in 1876 and another at Dhariwal. Handlooms formed part of the equipment of these mills for several years and even to-day some mills possess a few handlooms. Later, a mill was started in Bombay, and another at Bangalore, which was also an important centre of the cottage industry. There were four woollen mills by 1914, one each at Kanpur, Dhariwal and Bombay, manufacturing both woollen and worsted goods and only coarse blankets at Bangalore. The increased demand after World War I led to the establishment of three new mills around Bombay between 1919 and 1921. About the same time other mills also were started in Bangalore, Baroda and Amritsar. The total number of spindles rose to 74,500 and the amount of capital employed

rose from 50 lakhs to 240 lakhs by 1921. The industry was depressed on account of foreign competition between 1925 and 1933. The competition from Italy and Japan, following the depreciation of their currencies, was particularly keen, and three of the existing mills were subsequently liquidated. The industry applied for protection and in October, 1934, the Government of India referred this question to the Tariff Board. The Board made certain recommendations for the protection of the industry, but because two of the biggest mills, viz. Kanpur and Dhariwal refused to give evidence, the Government of India did not consider the matter. The Tariff Board found that by 1934 the number of mills increased to 13, spindles to 75,085 and looms to 1,595.

The Rege Committee found in 1939 that the number of mills increased to 24 out of which 16 were in British India and 8 in Indian States and they employed 17,201 persons daily. There were in addition 19 woollen carpet and shawl weaving establishments and 73 hosiery factories, employing 3,382 and 264 persons respectively. There were about one lakh handlooms, engaged in weaving. The mills were distributed as follows: U.P. 3, Punjab 6, Bengal 1, Bombay 4, Madras 1, Bihar 1, Kashmir 3, Baroda 1 and Rajputana 3.

The World War II gave a great fillip to the industry by securing heavy orders from the Allied Armies for the supply of blankets, jerseys, socks etc. to the armed forces. The number of mills rose to 32 in 1943-44, employing about 18,000 persons. The main centres of importance are Kanpur, Dhariwal, Bombay, Mysore and Kashmir. The production of the Indian mills rose from about 4 million lbs. to 15 million lbs. by 1918. In addition to the 24 mills, another two were started, one each at Allahabad and Bangalore to produce blankets.

The handloom producers in the Punjab, Kashmir, U.P. and Mysore, etc. did very well during the war, and their production increased all-round. It may be observed that the imports of raw wool increased from Rs. 62 lakhs to Rs. 4·02 crores between 1938 and 1944. During World War II, the Government commandeered the entire supplies of woollen goods at controlled rates and they released 25 per cent of the mill output for the civilian market from January, 1944. This reduced supply in the market and prices rose sharply. The Government withdrew control from woollen goods from January, 1947.

There has developed a small scale knitting industry using both power and handlooms in Punjab, U.P., Bombay and Bengal in addition to the knitting section of mills. It produces socks, stockings, caps, mufflers, pullovers, slipovers, coats, etc.

The Indian industry lacks in technical skill and suffers from the absence of mutual co-operation between the various units, especially Indian and European. This leads to cut-throat competition, inflicting heavy losses on the smaller units. The problems of industrial and scientific research and improvement of the internal organisation should be tackled by a central organisation of the woollen producers. A Wool Analysing Laboratory has been established at Poona and a central laboratory at Bombay.

The Hosiery Industry :—The history of the Indian hosiery industry is pretty old. The first factory was started in Kidderpore, a suburb of Calcutta, in 1892 under the name of the Oriental Hosiery Ltd.

The Swadeshi movement, following the "Partition of Bengal" agitation (1905) imparted an impetus to this industry and several factories were instituted. The first World War gave a further stimulus to the industry, which made large profits due to prevailing high prices. It enjoyed a boom till 1926. There was an all-round development and several modern types of machines were installed in different parts of the country. Later, it had to encounter severe competition from cheap Japanese goods. The difficulties of the Indian industry were further accentuated by the economic depression after 1929 and the continued depreciation of the Japanese yen.

The industry again revived, following the passing of the protective legislation in 1934. The Tariff Act of 1934 did not cover all branches of the industry, but the Act was suitably amended in 1936 to protect all branches of the industry. Although the period of protection was to expire on 31st March, 1939, it was extended up to 31st March, 1942 by an Amending Act.

The industry benefited substantially from World War II, when huge orders flowed from the army for hosiery goods. During the war, the hosiery industry came to be organised on a small-scale basis in Ludhiana and other centres in the Punjab Lahore, Jullundur, Rawalpindi, Kanpur, Lucknow, Bombay, Ahmedabad, and Calcutta were added to the list of chief centres

of the industry. The bigger units using power-machines turned out pullovers, slipovers, coats, etc., while the smaller concerns specialised in knitting of socks, stockings, caps and mufflers. Regarding the yarn used, the woollen mills could produce part of their yarn requirements, while the industry as a whole had to depend largely on foreign imports. The demand for woollen goods being seasonal, the knitting units produced woollen goods only for four to five months in the year and switched on to knitting of cotton goods during the rest of the year.

It may be observed that the number of factories rose from 10 in 1941 to 42 in 1944 with 30 in Punjab, 5 in U.P. and the rest in Delhi and Bombay. It is estimated that hosiery units produced one million pairs of socks and stockings per month in 1946.

Rayon Industry :—The scope for the development of this industry in India is considered quite promising since we have all the raw materials for the successful working of the industry, namely, soft wood, bamboos, cotton, etc. In addition, there is a vast inland market which is expected to widen with the gradual improvement in the standard of living of the masses. During the quinquennium preceding the outbreak of the war, India was importing, on an average Rs. 35 million worth of artificial silk and yarn per annum, mainly from Japan.

The Travancore State is the pioneer regarding this enterprise. The State sponsored a joint stock company with a capital of Rs. 15 millions for the purpose of manufacturing rayon in 1947. The factory is under construction and production is likely to begin at an early date. The capacity of the plant installed is 5 tons of artificial silk yarn per day, which is likely to be increased to 10 tons per day in due course.

The Hyderabad State has also recently floated a company for the same purpose. The paid-up capital of the concern is Rs. 20 millions. The initial production capacity is fixed at 5 tons per day, with provision for expansion to 10 tons.

A few leading Bombay industrialists are now proposing to start the manufacture of rayon products by the viscose process and a company has already been registered. It is stated that the promoters prefer viscose process, because it is cheaper, time-tested and basically sound and over 75 per cent of the world production of rayon is made by that process. The promoters aim at estab-

lishing a factory capable of producing 10 tons per day. In addition, the company proposes to manufacture transparent paper, which is an allied product and commands a large market in India. The company has an issued capital of Rs. 35 millions. The factory is to be located near Kalyan (60 miles from Bombay) where an abundant supply of fresh water and cheap hydro-electric power is available.

The Mysore Government is also reported to be considering the establishment of a rayon factory at an estimated cost of Rs. 20 millions at Kannambadi (16 miles from Mysore) where water and power facilities are plentiful. It is stated that two years of research of the State's Forest Research Institute has yielded results, disclosing that first grade rayon could be produced from bamboo, a material found in abundance in Mysore.

It may be observed that imports of rayon in 1923-24 were about 400,000 lbs. and rose to 37,500,000 lbs. in 1939-40 valued at Rs. 2,64,00,000 plus 54,000,000 yards of piecegoods, made purely of rayon, valued at Rs. 2,10,00,000. Thus the total consumption of rayon in India amounted to 48,300,000 lbs. valued at about Rs. 4,74,00,000 in 1939-40.

The Plastics Industry :—Although the Plastics industry is of comparatively recent growth, it has expanded rapidly, owing to the manifold uses of plastics. There is hardly any industry which does not use some or other of its products. The manufacturer of plastics, for instance, may count on substantial orders from the electrical, building, motor vehicle, shipbuilding packing and container, railway, synthetic chemical, aircraft, machinery, shop and office-fitting and house-hold equipment industries. Plastics has great potentialities in sugar and textile manufactures.

The Indian plastics industry received a great stimulus during World War II when imports of plastic goods from U.S.A., England, Germany and Japan considerably dwindled. A number of factories started functioning and initially they confined themselves exclusively to the manufacture of articles meant for domestic use. Later, they widened their field and began manufacturing electrical appliances, e.g., switches, ceiling roses, cut-outs, lamp-stands, shades, etc.

India possesses some natural advantages of raw materials. The three principal sources of raw materials are coal, petroleum, forest and agricultural products. Besides, there is easy access

to natural resins like lac, which is another useful raw material for the plastics industry. Facilities for the manufacture of Phenol formaldehyde resins exist in Bihar. The council of Scientific and Industrial Research has been very active in this field and the question of developing India's natural resources is being thoroughly investigated.

The market for plastics in India shows continued expansion and its consumption rose from Rs. 50 lakhs a year during 1936-39 to about Rs. 5 crores per year during 1943-46. In spite of a widening market, the Indian industry is beset with certain difficulties. Indian manufacturers largely depend upon imports of plastic powders from U.K. and U.S.A. and these countries are gradually diminishing their supplies to India owing to their own requirements. The future of the Indian industry therefore depends upon large manufactures of plastic powders within the country. Although there are two factories in Bangalore engaged in the manufacture of these powders, their total production is inadequate to meet the entire domestic needs. Attempts should be made to step up the production of plastic powders in India.

The following table illustrates the capital and labour employed in important Indian industries:—

Industry	Capital employed	Labour employed (1939)
	Million Rs.	Average daily No. of workers
1. Cotton Textiles	1,278·308	442,000
2. Jute Textiles	770·981	302,300
3. Sugar	378·370	81,800
4. Cotton Ginning and Pressing	341·573	168,000
5. Electric Power	338·942	14,700
6. Iron and Steel	292·229	43,200
7. Cement	176·780	9,600
8. Cigarettes	95·286	5,200
9. Paper	66·006	10,600
10. Flour Mills	47·706	5,700
11. Woollen Textiles	33·759	8,300
12. Soap	26·881	2,230
13. Matches	26·245	16,600
14. Breweries and Distilleries	25·322	2,140
15. Heavy Chemicals	7·400	5,000
16. Glass	1·818	7,000
TOTAL ...	3,907·606	1,124,370

Importance of Cottage Industries in India :—That cottage industries occupy an important place in the country's economy is illustrated by the fact that workers engaged in cottage industries even to-day form a large percentage of the total population and they vastly outnumber labourers employed in organised industries.

It is erroneous to think that in modern days, there is no place for small-scale industries, which have existed hitherto side by side with large industries and will continue to survive, because small industries have a few basic economic benefits. The introduction of electricity on a larger scale is likely to perpetuate the existence of small units on a sound economic basis. There are certain consumers' demands requiring artistic and luxury tastes and these can never be subjected to mechanical and standardised production. In addition, there are other industries in which personal touches are vital and as such they are likely to persist as small scale units of production.

It is also found that small industries stand the competition of large-scale production in an effective way, because they enjoy certain inherent economic advantages. An industry which is conducted at home derives the benefit of the labour of the entire family. A proprietary worker can invariably produce goods at a comparatively cheap cost of production and this is one of the underlying principles of the vitality of cottage industries. These advantages of small units can be adequately improved if the small craftsmen are given modern facilities of marketing, technical knowledge and financial help through co-operation and state aids of various kinds.

The importance of cottage industries is peculiarly important in India in view of the predominance of agriculture and of the rural bias of the population. In India a vast number of population remains without any effective employment and cottage industries offer by far and large the most suitable occupation for the general masses. Cottage industries requiring limited capital equipment and financial resources are admirably suited to Indian conditions.

In Indian agriculture it is normally found that the cultivators have no work for the major part of the year and this uneconomic leisure can be profitably employed in the pursuit of cottage industries. Besides Indian agriculture is so uneconomic at the

present stage of development that in order to raise the standard of living of the agriculturists, it is fundamentally important to supplement their incomes by the development of cottage industries.

Analysing the position of cottage industries in India, it is found that certain small industries like hand-spinning practically decayed after a flourishing career, following mills' competition. There are some handicrafts, competing with factory products, which are actually running very low and cannot be said to be economically sound. They nevertheless continue to persist due to the conservatism of the artisans, who are determined to drag on. They are reluctant to abandon their trades. In several cases, they are forced to adhere to their crafts owing to debts and pressure of the money-lenders. There are groups of small industries which are economically sound and competing successfully with machine-made products. These cottage industries are normally associated with agriculture and require simple tools and implements. They have also adjusted themselves to modern conditions by continued adoption of improved technique. The Industrial Commission reported that the weaver has taken to mill yarn, the dyer to synthetic dyes, the brass and coppersmith to sheet metal, the blacksmith to iron rolled in convenient sections. In some districts in Lower Bengal, the weavers use the fly-shuttle slay extensively and they have recently adopted it in large numbers in the coast districts of the Madras Presidency. It is also gradually coming into use elsewhere. The tailors employ sewing machines and town artisans use improved tools of European or American manufacture.

Cottage industries in India should therefore be regarded as complementary to large industries. India is a vastly undeveloped country and both may be equally encouraged with ultimate advantages to the community. Cottage industries occupy a unique significance in India's economy and the country was lucky that this aspect of the cottage industries was fully emphasised by Mahatma Gandhi on several occasions and he spared no pains to resuscitate cottage industries on an extensive scale.

The Cotton Handloom Industry :—The cotton handloom industry ranks pre-eminent amongst cottage industries. It shows a remarkable vitality and adaptability. It holds itself on par with mill-made cloth. It produces coarse cloth which is durable and preferred by rural folk to mill-made cloth. The weaver has his

own distinctive sphere in fine fabrics of specialised qualities. In addition, he enjoys the advantage of his family labour. The weaver in India has also been found to improve his technique of production with modern times and this has kept his position unassailed. In spite of the continuance of handloom weavers, they are definitely poor and live a low standard of life and improvements in this direction are urgently called for.

The following table illustrates the statistical position of handloom cloth produced in India:—

	Yds. (crores)		Yds. (crores)
1905-6	108	1923-24	101
1909-10	90	1926-27	133
1913-14	107	1930-31	139
1918-19	105	1936-37	149

Until recently the handloom industry was left alone and had to struggle hard to survive.

In certain cases only Provincial and State Governments have been trying to help it by encouraging the introduction of improved appliances, especially fly-shuttle slays. In Madras the Government showed early interest in the handloom industry and have maintained it. They started a weaving factory at Salem in 1906 for experimental work under Alfred Chatterton. This created much enthusiasm and the Industrial Conference of 1908 made recommendations of a far-reaching character regarding industrial policy, but the then Secretary of State Lord Morley was a strong advocate of laissez faire and did not favour such a state policy. So the Madras Government abandoned their policy of helping industries and launched schemes of industrial education instead. In United Provinces the peripatetic weaving schools were abolished and model weaving schools were established at certain centres, entrusted with the task of demonstration work also. Central units which were established did admirable spade work although in a limited field.

The Indian handloom industry had to encounter a lot of difficulties especially after 1930. The markets for handloom cloth showed a declining tendency. The Provincial Governments took a serious view of the situation and suggested that the problem could be solved only on an All-India basis. Accordingly a "meeting of

the reconstituted Industries Conference" was held in Simla in July, 1933. The Government of Madras proposed the levy of a cess on Indian mill yarn with a countervailing duty on Indian and imported cloth, the proceeds of which were to be applied to setting up a proper organisation for the handloom industry, mainly through the co-operative agency. This suggestion did not receive general approval, nor did the idea of co-operative agency evoke any enthusiasm. Sir Allen Lloyd, while disapproving of a cess on imported yarn, indicated the possibility of grants-in-aid from the Central revenues. The Government of India agreed that the handloom industry was affected by the import duty on yarn and so along with the Tariff (Textile Protection) Amendment Act of 1934, a grant to the handloom industry equivalent to the proceeds of an import duty of ¼ anna per pound of imported yarns up to 50s was included in the budget of 1934-35. A grant of Rs. 5 lakhs per annum was distributed in the year 1934-35 and utilised by the Provinces for approved schemes.

A conference was convened at Delhi in December, 1940 to tackle the problem of yarn shortage for handloom weavers. The discussions at the conference disclosed that there was a lack of reliable data on many crucial points relating to the hand-weaving industry and on the exact nature of the competition, if any, between it and the mills. It was therefore, decided to appoint a Fact-Finding Committee to investigate into the problems of the handloom industry, the types of production, the difficulties of obtaining yarn and marketing finished products, the state of the handloom technique, the lines of reorganisation and the possibility of demarcating a special field for the handloom industry. The Twelfth Industries Conference which met at Lucknow in December, 1940, endorsed the proposal for the appointment of a Fact-Finding Committee and accordingly a Fact-Finding Committee was constituted under the Chairmanship of Dr. P. J. Thomas by the Commerce Department early in 1941. It is reported that despite the unsatisfactory condition of hand-weavers in many parts of the country, it is not correct to consider hand-weaving as a decaying industry. This can be seen by an examination of the numbers engaged in the industry, by the substantial improvements in production lately carried out and by the profitable business pursued by certain sections of the industry which are properly organised. In spite of the decline in the numbers

employed in the industry, there are to-day more than 2½ million workers engaged in handloom weaving and this cannot be over-estimated in view of the fact that there are as many as 2 million looms in the country. It is also estimated that population around 10 million are still depending on this industry. The cotton textile industry employs 4,30,165 workers out of which a considerable number is working in spinning mills, producing yarn for the hand-looms. Thus, although the mills are producing 61 per cent of the total cloth consumed in the country, they employ only a seventh of the total number of workers in the cotton textile industry and the remaining six-sevenths are employed in the hand-weaving industry. The 2½ million workers engaged in hand-weaving maintain a population of about ten millions. If after a hundred years of mill competition, the handloom industry is still able to employ such large numbers, certainly it indicates that the Indian handloom industry has unique capacity for survival. It may be remembered that during this period the handlooms in nearly every other country have either disappeared or dwindled to a negligible proportion. The virility of this industry is illustrated by the commendable adjustments made in certain centres in regard to the methods of production, designs, quality of work, etc. Fly-shuttle slays, dobbies and jacquards have been introduced in many places and substantial improvements in workmanship have also been effected. Hand-weavers in various parts of the country have been following the changes in popular taste and have adjusted their workmanship to modern requirements. They have also been frequently utilising the use of chemical dyes in recent years and producing an innumerable variety of colours, which are well appreciated. The total cloth produced on small power looms and handlooms is estimated at about 1,500 million yards.

Economics of Khadi :—Khadi has come to occupy a memorable place in the political and economic life of the country. Among the various economic remedies advocated by Mahatma Gandhi, Khadi production is the most important and controversial piece of reform. Khadi is acclaimed as the symbol of unity of the Indian population, their economic freedom and equality. Khadi mentality implies a decentralisation of production and an equitable distribution of the necessaries of life. It has been urged that every village should produce in addition to all its requirements, a certain percentage for the cities.

In normal years our country used to consume annually about 10 million yds. of Khadi, worth about Rs. 34,00,000. Hand-spinning and weaving received special stimulus after 1920, when the Indian National Congress started to propagate that people should wear Khaddar as a symbol of discipline and sacrifice. The All-India Spinners' Association was started in September, 1925 and separated from the Indian National Congress. The Association has been a driving force in the industry since that date. The Khadi movement was revitalised by the installation of Congress Ministries in Provinces after 1937.

The industry is handicapped by high costs of hand-spun and hand-woven cloth and un-uniform quality. The advocates of Khadi however feel confident that costs and quality can be competitive by the utilisation of modern technique.

The All-India Spinners' Association extends its operation to over 15,000 villages and engages over 350,000 artisans. Khadi worth Rs. 1,20,02,430 was produced in 1942 and workers earned wages of about Rs. 80 lakhs. The All-India Spinners' Association produced Khadi of the value of Rs. 6,83,57,862 during the past eighteen years and paid wages of about Rs. 4,10,30,031, representing nearly 60 per cent of the cost of production compared to 22 per cent in the organised large-scale textile industry. The aggregate funds employed in the activities of the Association have amounted to about half a crore of rupees. The artisans benefiting from the work of the Association are spinners numbering 3,24,391, weavers 25,024 and ginners and carders etc. 4,842.

The aim of the All-India Spinners' Association is to render each village self-sufficient in matters of cloth. The Khadi industry is likely to absorb a large number of unemployed rural population, if it can be organised on right lines.

The Woollen Handloom Industry :—The manufacture of woollen goods is found in nearly all parts of the country. The quality of the wool varies from place to place, the sheep in the hilly tracts generally yielding wool of finer quality. The woollen handloom industry absorbs about 40,000 people.

The manufacture of woollen carpets reached a high degree of excellence during the Mogul period. The demand for woollen carpets flowed chiefly from the royal courts and nobility, and the industry in consequence was located mainly in

the principal cities. Afterwards it migrated to other centres following the break-up of the Mogul Empire. Though the downfall of the Empire eliminated the local demand for carpets, it was compensated by foreign demand after the institution of the British rule. The foreign demand encouraged the production of cheap articles, fashioned according to patterns sent out to India from abroad and notable deterioration in quality occurred. The use of aniline dyes assisted the prevailing deterioration. The opening of the foreign markets attracted a large number of middlemen in the export trade of these goods. Carpet-weaving in India now depends almost entirely on foreign demand, which absorbs about 90 per cent of the total production.

Carpet-weaving as a cottage industry is in a languishing condition due to the ignorance and poverty of the weaver and lack of organisation. Very often the weaver accepts advances from the dealer and produces according to the dictation of the latter, having no personal interest in the work. The weaver is at the mercy of the dealer and has no opportunity of obtaining a fair price for his product.

The manufacture of shawls was well known in India in pre-British days, especially in Kashmir and Punjab. The Moguls were particularly interested in the development of this industry. The famine of 1830 hit the industry hard and the difficulties of the industry also increased by various imports of the Kashmir State. The development of an export trade to Europe which began in the early years of the nineteenth century assisted the industry, which absorbed over 15,000 workers. The European demand sharply declined following the Franco-German war of 1871. The demand never revived, as shawls were no longer a fashion and the Indian industry was further handicapped by the beginning of shawl manufacture at Paisley in England.

The production of blankets is widely prevalent in India and is generally a by-occupation pursued by shepherds or agriculturists. This industry is important, because it employs a very large number of people. The blanket-weaving industry offers a good scope of development as a cottage industry, as there is a large domestic demand for blankets. Raw materials are abundantly available and there is no possibility of foreign competition.

The Silk Industry :—The East India Company was primarily interested in the trade in raw silk during the first three-quarters

of the seventeenth century. Subsequently, the Company began to export Indian silk manufactures to England in large quantities. This met severe opposition of English weavers. The East India Company once more reverted to the trade in raw silk. The policy of favouring the production of raw silk and discouraging manufactures had unfavourable repercussions on the indigenous weaving industry, which was subsequently hit hard by the growth of the silk-weaving industry in Europe with modern technique. Japan, China and the United States also emerged as competitors in the European markets. The domestic demand for hand-loom silk goods disclosed a declining tendency as the educated and well-to-do classes no longer fancied such articles.

Sericulture and silk-weaving have suffered in India during recent times. India's exports of the raw material have not only decreased in volume but have changed in form. Silk is mostly exported in the form of waste or cocoons. The reeling is so badly done in India that foreign countries prefer to take the cocoons from this country and do the reeling themselves This also accounts for the popularity of imported silk in India. The Indian weavers themselves prefer the more evenly reeled Chinese or Japanese silk to the home-made product. Efforts are being made, especially in West Bengal, to improve the quality of the Indian silk. The Agricultural Department in this province runs two sericultural schools. Attempts are also being made in Assam and the Indian States of Kashmir and Mysore to encourage sericulture. The Government of India established the Imperial Sericultural Committee in 1935 and grants amounting to Rs. 93,000 were allotted to various provinces to enable them to set up schemes for the benefit of sericulture in Bengal, Assam, Madras, Bihar and Orissa and Burma. The schemes were designed to increase production of disease-free seeds and to help the investigations regarding silk-worm disease. Imports of artificial silk yarn rose from 225,000 lbs. to 7,700,000 lbs. between 1922-23 and 1928-29. Imports of artificial silk amounted to Rs. 487 lakhs in 1937-38. Although Japan dominated in India's imports of silk, she was nearly outstripped by Italy before World War II. The reduced prices and improved quality have contributed to the increasing popularity of rayon products. The indigenous silk-weaving industry has been steadily losing ground to manufactures from abroad for lack of efficient organisation, inadequate resources of the

average weaver and his antiquated methods of production. The manufacture of silk goods as a cottage industry enjoys certain peculiar advantages in India. Any large-scale production with modern mechanical appliances is relatively more difficult to introduce in this industry than in the case of cotton manufactures and has hardly yet been tried in this country. Besides, silk manufactures, being luxury goods in India, offer scope for diversity in workmanship. The indigenous industry is sheltered in a large measure by the import duty on manufactured goods, which is double that of the raw material. The domestic industry is likely to flourish as a cottage industry in India, because Indian consumers are again preferring indigenous products to foreign merchandise.

The Indian Tariff (Textile Production) Act of 1934 also gave protection to the Indian sericultural industry according to the recommendations of the Tariff Board. It levied protective duties on raw silk, silk yarn, piece-goods and mixtures as well as on fabrics of artificial silk and mixtures. The duty on artificial silk yarn was also raised to 25 per cent ad valorem with an alternative minimum specific duty of 3 annas per lb. The protective duties on silk and silk manufactures were extended for a further period of two years in 1940.

The consumption of silk in India was estimated at about 10¼ million pounds in 1938; 1,500,000 lbs. silk were produced in India; 2,250,000 lbs. raw silk imported from abroad; 6,500,000 lbs. silk imported as manufactured fabric.

It may be observed that there are various other important cottage industries, *e.g.*, furniture, embroidery, jewellery, cutlery, metal, soap-making, match-making, pottery, cap-making, doll-making, ink, bread and pastry-making, etc.

Silk Industry in West Bengal :—Every effort is being made by the West Bengal Government to revive the silk industry, once the glory of Bengal. While steps are being taken to organize rearers of silkworms into efficient working groups for the production of the right type of cocoons, which form the foundation of the industry, reelers are also being encouraged on co-operative lines by the provision of finance and offer of various inducements in the shape of wages and rewards. Organizations are also being set up for the disposal of silk yarn.

To ensure the maximum financial return a weavers' organization has been set up and utilization of silk waste is being looked after. Marketing arrangements are being made for the disposal of finished fabrics.

There are about 5,700 silk weavers who have specialized in manufacturing typical varieties of fabrics in different districts. Sonamukhi in Bankura and Islampur in Murshidabad excel in making shirtings of various designs, whereas Vishnupur in Bankura, Mirzapur in Murshidabad, Anandapur and Keshiary in Midnapore, Dainhat in Burdwan, and Malda specialize in dhoties and saris. There are areas in Midnapore and Nadia where weavers use natural and art silk for designed borders of cotton dhoties and saris.

Weavers buy both foreign and Indian raw silk, the former from local importers and the indigenous variety from centres of production in Malda and Murshidabad. The sources of foreign silk are Italy, Shanghai, Hongkong and Japan. Silk yarn from U.S.A. and Japan, spun silk from U.K., and U.S.A., and gold thread from Benares, Surat and France are also used. If imported silk is cheaper than indigenous, weavers in some places use imported goods exclusively. Usually, however, the warp is prepared from imported silk, while the weft is made from indigenous material.

Weavers generally sell their goods to local mahajans, who, in turn, sell them to Calcutta, Delhi, Madras and other markets. They are seldom exported. Bengal silk is superior to foreign silk as far as glaze and durability are concerned, but inferior in other ways.

The market for silk has shrunk considerably since the partition of the country. West Punjab, Sind and East Bengal which provided a steady demand have been practically closed.

Bengal's silk industry is of historic importance and the establishment of a silk reeling factory at Cossimbazar in the middle of the 18th century by the East India Company was an important development. Lack of uniformity in the locally manufactured reeled silk was removed with the help of an expert, Wilding, who was brought to the Cossimbazar factory by the Company.

To improve the yield and quality of cocoons, worms were imported from China in 1771, but with little result. Between 1770-1775, improved reeling was introduced—an adaptation of French

and Italian methods on locally made wooden machines. This was an improvement on the older practice and, though not as efficient as desired, it brought about substantial improvement in quality. After 1775, the Company began to trade in raw silk reeled in their factories from cocoons purchased from local rearers.

During the period 1776-1785, the import of Bengal silk into England averaged 560,285 lbs. per year. The Company's silk continued to grow in popularity and in 1805 exports to England totalled 835,904 lbs. In 1832, the Company ceased to import directly and, as a result, there was a steady decline in Bengal's silk export. A minor revival occurred in 1845-46, when an epidemic among silkworms broke out in Europe.

The demand for Bengal's silk, however, began to decline again from 1873 as it failed to compete in quality with raw silk from Japan. With the fall in demand, there was a fall in price too. The rent for mulberry lands, however, remained the same—Rs. 50 per acre—and competing crops, especially jute, showed a spurt in prices. Cultivators, therefore, began gradually to turn from mulberry to other crops.

The State in Relation to Cottage Industries :—The ignorance of artisans is a great handicap to the development of cottage industries in India. It is therefore essential to provide manual training and education in industrial crafts. The Department of Industries, Bombay, maintains six weaving schools for training hand-loom weavers. The Industrial Commission recommended that demonstration hand-loom factories assisted by the Government should be started for the training of the intelligent section of weavers and a commercial section should be attached to the weaving schools in order to enable enterprising artisans to start small hand-loom factories on their own account. The jails and reformatory schools teach various industrial crafts, *e.g.*, carpentry, cane and bamboo work, etc., to enable the prisoners to set up as craftsmen after they are discharged. The supply of raw materials of quality to cottage industries should be arranged. Attention should also be paid towards improving the technique of cottage industry through modern implements and tools. Demonstrators have been appointed in Bihar and Orissa to conduct peripatetic demonstration of improved appliances. The Cottage Industries Institute carries out experiments in various sections, arranges for

the supply of looms, dyes, accessories, etc., and introduces new cloths and new patterns among weavers. Similar services for the silk industry are rendered by the Bhagalpur Silk Institute and the experimental blanket factory at Gaya is endeavouring to improve the indigenous blanket industry. The Department of Industries in Central Provinces is attempting to introduce improved slays among weavers.

As lack of finance is a great drawback of Indian cottage industries, the Industrial Commission suggested that small loans should be given by the Director of Industries, or that tools and plants should be supplied on the hire-purchase system so that they become eventually the property of the artisans. The problem of finance is likely to be effectively handled by co-operative credit. The principle of co-operative is aimed at helping the small artisans by providing loans at a reasonable rate of interest and affording facilities in the purchase of raw materials, tools and implements and in the sale of finished products. Artisans suffer from lack of a marketing organisation. They cannot advertise their goods and fail to secure fair prices. The Arts and Crafts Emporium at Lucknow, Lahore and Madras are designed to remove this handicap to a certain extent. It may be observed that great attention is usually paid in foreign countries to this aspect of marketing. The toy industry of Germany and the cottage industries of Japan benefit substantially from the business organisation, which takes over the produce of the industries and disposes of it within the country and abroad. The Swadeshi Stores in Bombay provides a good illustration of an active and successful agency for internal distribution of indigenous products. The Department of Industries, Bombay, has also opened a Sales Depot in Bombay for popularising the products of cottage industries. The problem of the marketing of hand-loom products was considered at the sixth Industries Conference in 1934 and various co-operative schemes have since been adopted by the Provincial Governments of Madras, Bombay, Bengal, Central Provinces and Berar, Punjab, Bihar and Orissa. Eight Co-operative Industrial District Associations have been formed in Bombay at important centres. Each Association is to own a shop of its own, which will accept on consignment account against partial advances, and sell on a commission basis products of hand-loom weavers. A marketing officer and a textile designer have also been appointed. The Industrial Museum

maintained by the Industries Department of West Bengal Government is likely to be helpful in this regard. Although the responsibility of cottage industries vests in provincial governments, it is gratifying to observe that the Centre is now taking an active interest in speeding up the growth of cottage industries. The Central Cottage Industries Emporium established at Delhi by the Ministry of Industry and Supply will be of great assistance in the marketing of products of cottage industries.

A country-wide propaganda is necessary to popularise products of cottage industries in India. The sixth Inter-Provincial Industries Conference held in July, 1934 discussed various schemes submitted by Provincial Governments for the promotion of the hand-loom industry. The Government of India announced at the conference that it had decided to spend about Rs. 5 lakhs every year for five years for the development of the hand-loom industry. The various schemes of the Provincial Governments include the training of weavers in improved technique of production, the establishment of sale depots and weavers' co-operative societies for the marketing of hand-loom products and the introduction of new patterns and designs. The seventh Industries Conference also favoured the holding of exhibitions of hand-loom machineries and fabrics.

Cottage industries received fresh stimulus from the inception of provincial Congress Ministries in 1937. The All-India Village Industries Association, established in 1935 under the auspices of the Indian National Congress, has been actively trying to revive cottage industries in villages. The set up of the National Planning Committee in 1939 by the Working Committee of the Congress has also emphasised the importance of cottage industries in India's economy.

The Government of India constituted the All-India Cottage Industries Board in 1948 and at first meeting, the Board decided to help the growth of cottage industries not only regarding internal consumption of their products but also through exports and recommended that each Trade Commissioner's office should have a showroom for cottage industry products.

The Board decided that the Provincial and State Governments would primarily be responsible for development and expansion of cottage and small-scale industries, while the Central

Government acting under the advice of the Board, would give them all assistance by way of co-ordination and technical advice.

The Board recommended early establishment of a central training institute to undertake primary training of instructors in cottage industries, advanced training in the technique and organization of such industries, refresher courses for master craftsmen and exploration and utilization of raw material resources, development of small machine tools and accessories for cottage industries and adoption of small machinery imported from abroad for these industries.

It was decided that all Provinces and States should undertake a thorough simultaneous survey of cottage industries on uniform lines indicated by the Board and the results be collected on an all-India basis by the Director-General of Industries and Supplies.

The Board recommended that every Province and State should establish a Cottage Industries Board to co-ordinate all activities relating to cottage and small-scale industries in its area and that All-India Board maintain close contact with the provincial boards.

Another resolution emphasized the importance of providing adequate credit facilities to persons engaged in cottage industries.

The Board emphasized the importance of standardization and quality control at the production stage and recommended establishment of an export screening committee to select samples of products to be sent abroad. While the Government will thus stimulate exports through their Trade Commissioners, there will be no interference with normal export trade.

The Board stressed the importance of integration of large-scale and cottage industries and decided that two possible ways of such integration, namely reservation of certain fields of production for cottage industries and manufacture of components by cottage industries for large-scale industries and vice versa, should be examined by the expert Development Committees already functioning under the Director-General of Industries and Supplies; these committees should be expanded to include persons connected with allied cottage industries.

In view of the most urgent need of rehabilitation of refugees and of the fact that organization of cottage and small-scale industries is one of the most important means of rehabilitating them, the Board recommended that Provincial and State Governments

take urgent steps to establish refugees in such industries and provide equipment, raw materials, technical guidance and training courses. Wherever necessary, assistance to refugees should be given, as far as possible, through co-operative societies or organized groups of refugees.

The Board constituted a committee to examine the progress made in Provinces and States in co-operative organization of cottage industries and to suggest ways by which the co-operative organization could be accelerated and made more effective.

A Standing Committee for the hand-loom industry was formed to replace the All-India Handloom Board. The Standing Committee will consist of certain members of the Cottage Industries Board, official representatives of all Provinces and certain States, weavers' representatives from all Provinces and certain States, a spinners' representative, a representative of the textile mill industry, a representative of the handloom printing industry, and representatives of the Government of India. It was also decided to establish standing committees to deal with cottage industries in leather and metal-working.

Pakistan :—Pakistan is deficient in industrial development and has no jute manufacture, ship building, iron and steel works, copper smelting, lead melting, mica melting, dyeing and bleaching, paper and paper pulp, soap and metal stamping industries. Lack of diversity is an outstanding feature of Pakistani industries and the average size of an industrial unit is comparatively small. The following tables are interesting.

TABLE I

PERSONS EMPLOYED IN MAIN INDUSTRIES (*in 000*)

	Indian Union	Pakistan
Textiles	11,34	32
Engineering	3,75	46
Minerals and Metals ...	90	8
Food, Drink and Tobacco ...	3,19	24
Chemicals	92	4
Paper and Printing ...	61	4
Wood, Glass and Stone ...	1,09	8
Hides and Skins	30	3
Gins and Presses	1,34	47
Miscellaneous	1,87	21

There are about 1,213 industrial establishments in Pakistan employing nearly 2,50,000 workers, compared with 10,881 and 25,80,000 respectively in the Indian Union.

TABLE II

Persons employed	No. of Industries in	
	Indian Union	Pakistan
Over one lakh	5	...
50,000 to one lakh	4	...
10,000 to 50,000	24	5
5,000 to 10,000	13	4
1,000 to 5,000	23	19
500 to 1,000	8	11
Below 500	7	19

We have already pointed out that Pakistani cotton mills produce about 103 million yards of cloth per annum and the total handloom production is estimated at about 152 million yards, out of which West Punjab accounts for about 46 million yards and East Bengal 100 million yards.

The jute pressing industry has been fast developing in East Bengal since the division of the country.

There are eight sugar factories including gur refineries with daily crushing capacity of about 3,725 tons. There are three working sugar mills, producing an annual output of about 16,750 tons.

Pakistan has four cement factories, producing about 249,041 tons a year.

Although there is no woollen mill in Pakistan, she produces about 3,605,000 lbs. of blankets and 440,000 lbs. of carpets on a cottage industry basis.

There are about seven match factories in Pakistan, producing nearly 6 million grosses and there is a dearth of suitable wood for match sticks and boxes in Pakistan.

Pakistan possesses about seven glass factories, producing about 7,000 tons per year.

There are three breweries and distilleries in Pakistan and she also produces about 31,500 tons of soap a year.

Pakistan has three factories for manufacturing heavy chemicals and the total annual production is estimated at a little over 10,160 tons.

Surgical Instruments Industry :—The surgical instruments manufactured at Sialkot in West Punjab have been extolled for exquisiteness of design, fineness of material and soundness of construction. Experienced workmen are employed in the factories and instruments are manufactured under expert supervision in order to maintain a world wide reputation and a high standard of traditional excellence in workmanship. These instruments are in no way inferior to those manufactured either in Europe or in America.

Sialkot has been the home of the surgical instruments industry in the Indo-Pakistan sub-continent during the last 50 years. The first factory, erected in the last quarter of the 19th century, supplied instruments of day-to-day use to the hospitals in India and later started the manufacture of hospital equipment and appliances.

At present there are about 15 firms in Pakistan engaged in the large-scale manufacture of surgical instruments, in addition to others which are run on a small scale. While the leading firms dealing in the manufacture and export of goods are located at Sialkot, there are two other firms, one at Lahore and the other at Multan.

The value of the annual output of surgical instruments at Sialkot during the pre-war period was estimated at about Rs. 4,00,000 and during the war years it exceeded Rs. 35,00,000. Pakistan's main customers are the Indian Union, Middle Eastern countries, East Africa and Burma.

The name Sialkot has been synonymous with sports goods. Sialkot sports goods are exported from the port of Karachi. Pakistan possesses advantages in the manufacture of sports goods from the point of view of skilled labour and essential raw materials. A special kind of wood and superior tanned leather which are the two essential raw materials required for the manufacture of sports goods, are available in abundance in Pakistan.

Sulphuric Acid Plant :—Three sulphuric acid plants, two of 10-ton capacity and one of 20-ton, will soon be operating in

Western Pakistan. They will be located at Karachi, Lyallpur and Rawalpindi (West Punjab).

Fertilizer Factory :—Another proposal which is receiving the immediate attention of the Government is the establishment of an ammonium sulphate (fertilizer) factory of 5,000 tons capacity per year.

There is a soda ash plant at Khewra (West Punjab) with a capacity of 20 tons of light soda ash per day. The soda ash in excess of the requirements of Pakistan is exported to India. The question of making heavy or dense soda ash is now receiving the attention of the firm.

Pharmaceutical Industry :—Pakistan is rich in some of the herbs required by the pharmaceutical industry. It has also substantial quantities of alcohol from molasses for conversion into tinctures like iodine, etc.

The Government of Pakistan have established a Bureau of Laboratories to manufacture vaccine, sera, etc. They are also encouraging private enterprise to establish pharmaceutical works on up-to-date lines.

Ephedrine is now made from ephedra which is found in Baluchistan. Two units for the manufacture of santonin from Artemisia of the Kurram Valley (North-West Frontier Province) are on the immediate programme of two entrepreneurs.

The Woollen Industry :—Pakistan produces 26·5 million pounds of wool a year and imports through its land frontiers another 8 million pounds.

Baluchistan alone exports about 1,800 tons of wool worth Rs. 30,00,000 (about £225,000) every year.

Pakistan wool is used in the manufacture of tweeds, rugs, carpets and blankets. Two million pounds of wool are required for use by the local cottage industry for the manufacture of rough blankets and carpets. The Government have decided to assist in the establishment of five yarn spinneries for spinning yarn with a total spindleage of 25,000 spindles. Two of these spinneries will be in West Punjab and one each in North-West Frontier Province, Baluchistan and Sind. These spinneries will produce 4·5 million pounds of yarn annually. The Government also propose to assist in the opening of finishing centres in all these regions, each centre comprising two sets of raising and finishing machines.

Permission has been given to two parties to set up woollen and worsted mills, one at Karachi and the other in West Punjab.

The Glass Industry :—There are three factories in Western Pakistan and two in Eastern Pakistan, which are producing Containers, Pressed and Blown Tablewares.

A few small units are being created in West as well as East Pakistan to produce bangles and hand operated hollow-wares. The most significant development, however, is the installation of a 20-ton a day fully automatic plant to produce hollow-wares at Karachi.

The Footwear Industry :—The annual footwear requirements of Pakistan are estimated at about 28·5 million pairs. Its annual production is estimated at about 10·75 million pairs of leather footwear and 2·5 million of canvas and rubber footwear. The deficiency is made up by imports.

There are five large-scale footwear and leather goods manufacturers in Pakistan. The targets fixed for West Pakistan are 10 mechanised footwear factories and five for East Pakistan, each factory producing more than 1,000 pairs a day.

The need for machinery and technical experts is even greater in the footwear than in the tanning industry. It is considered that there is likely to be no difficulty in importing complete sets of machinery.

Pakistan is one of the largest producers and exporters of raw hides and skins of superior quality and assortment, the estimated annual production being 811,000 buffalo hides, 4,473,000 cow hides, 5,350,000 goatskins and 2,075,000 sheepskins. The bulk of these hides and skins has to be exported to India, the U.K., the U.S.A. and other countries in a raw state.

Indigenous tanning may be further developed in West Punjab and Sind where climatic conditions are favourable and labour is plentiful. Though Eastern Pakistan is rich in raw hides and skins which are light in weight and superior in quality and assortment it possesses practically no tanning industry.

Industrial Factory Estates :—It may be observed that in order to facilitate and encourage industrial development, the Sind Government have undertaken the construction of three Industrial factory Estates situated at Karachi, Hyderabad (Sind) and Sukkur. These Trading Estates aim at providing the services necessary to

enable manufacturers to establish their factories with the minimum trouble and delay.

The facilities offered by the Sind Government to industrialists by establishing their factories on one of the three Industrial Estates are in many ways similar to those provided by similar organisations in the United Kingdom, excepting that the Estate Administration does not undertake to erect factories on rent, although, if desired, construction will be undertaken on behalf of tenants on payment.

Each Estate is planned in accordance with recent developments together with extensive experience gained in factory construction in the East and ensures tenants of a first class industrial site.

The development, construction and management of these Industrial Estates is conducted by a Public Company, known as Sind Industrial Trading Estates Limited, having its Head Office in Karachi. The Company is financed and owned entirely by the Government of Sind. The Board of Directors comprises four officials of the Sind Government and three prominent non-officials. The terms of reference of the Company, laid down in the Articles of Association, require 4 per cent per annum to be paid on Government funds, advanced for Estate development, and, after the administration expenses have been paid, any surplus funds are returnable to the tenants by way of reduction in rent, etc., or additional facilities, as the Company is not authorised to declare a dividend.

In planning these three Industrial Estates, careful attention has been paid to the requirements of those industries which are likely to develop in Western Pakistan and more particularly in the Province of Sind, having due regard to raw materials locally available and other economic factors. Thus the Karachi Estate is primarily intended to accommodate those industries whose raw materials will for the most part arrive by sea, as well as those factories requiring a high percentage of skilled labour; engineering works and trades connected with shipping and port have also been catered for. It is interesting to note that the Trading Estate is connected to the Docks within a short distance by a direct railway line.

Industries now being established at Karachi include tea packing and blending, cigarette manufacture, plastics, clocks and

watches, hardware, boots, shoes and leather work, printing, electrical machinery, hosiery, manufacture of yarn and thread.

At Hyderabad (Sind) the Estate is primarily intended to cater for those industries relying on the surrounding district for its raw materials. Thus cotton textile mills are especially provided for as the best cotton in Sind is obtained locally.

This Estate provides special facilities for the tanning of hides and skins which are obtained in large quantities. A large oil-seed industry is also developing and factories are being installed for the crushing, refining and the manufacture of vegetable cooking fats and animal foodstuffs. The Estate Administration also anticipates a large potential seasonal industry in the manufacture of fruit cordials, jams, preserves and canning of the famous Sind Grape-fruit. An outstanding feature of this Industrial Estate is that it is at a centre of a well-developed provincial communication system and is an ideal distributing point for local consumer goods.

The Sukkur Estate is also intended to provide facilities for factories utilising local raw materials. As in the case of Hyderabad, great care has been taken in locating this industrial area at the centre of local communications, so that the abundant agricultural products of the Barrage Zone can be readily brought in to the factories. The main industries to be catered for here are woollen mills, oil-seed industries and hides and skins.

The Cottage Industry :—In Pakistan where 90 per cent of the people are dependent on agriculture and live in villages, cottage industries have a special significance and play a vital role in the national economy of the State. A Pakistani village is more or less self-sufficient. It has its own set of artisans who provide most of the rural needs and requirements. Trades usually run in families as in medieval Europe.

Cottage industry in Pakistan is financed in three ways, *e.g.*, by professional financiers, who purchase raw materials and supply them to workers and artisans. Finished goods are collected and payments made on piece work system. The manufactured goods are then sold or exported according to a well organised distribution system through wholesale and retail stores. There are middlemen who advance loans to artisans for purchasing materials. They then sell the products to dealers who are either wholesalers or retailers. Then there are artisans who purchase their own materials

with their own capital or with borrowed capital and sell direct to consumers.

The main products of cottage industry run on a large scale are footwear, leather goods, sports goods, leather curios, glue, etc. The Pakistan Government have come to an agreement with Technical Services Association (Pakistan) to develop these industries on modern lines and market these products in the U.K., the Commonwealth and U.S.A.

Fur trade, an important cottage industry of Pakistan is also being run on an organized scale. "Persian Lamb" is now finding a good market overseas. Other items under this category are known as "Guldar", "Nazakcha", "Wild Cats", "Thra", "Stone Martin", "Vain Martin", "Leopard Skins", "Fox Skins" and "Squirrel Skins". All these furs are available in West Punjab.

Hand spinning and weaving, as a cottage industry, is carried on throughout Pakistan especially by women as part-time occupation. In East Bengal women earn their living from it by making it a full-time job. Dacca and Chittagong in Eastern Pakistan are the chief centres. The Dacca Muslins were world famous at one time and were well-known throughout Europe as "Gangetica". Handloom weaving still holds an important place in the province. The three types of shuttles used are the throw shuttle loom, the fly shuttle loom, and the semi-automatic loom. The best variety of Muslins made out of mill yarn are called "Jamdanis". There is a Government Handloom Institute where weaving is taught to students on scientific lines. Cotton fabrics are woven by hand as a cottage industry in most parts of the province, and the cloth is consumed locally. The present Government has given a fillip to handloom production by forming a spinners' association and encouraging home-spun cloth in every possible way. Beautiful longcloth called "Khes" is made in Dera Ismail Khan, Kohat and Peshawar. Spinning and weaving are also carried on extensively in West Punjab.

In East Bengal where jute is plentiful, jute spinning and weaving is a valuable cottage industry. The bulk of jute goes, of course, to the mills, but the rest is turned into cloth on a cottage basis. Some families have been engaged in this industry for generations. They either buy their raw material in the market or grow it themselves. A spindle is used for turning the jute fibre into yarn. This is generally done by women. A primitive

loom is used for making gunny cloth. A rough twine is used for making gunny bags and quilts. Sails are made of finer thread. Of late Government have tried to popularize improved appliances among jute workers. Demonstration parties are sent regularly to train workers in improved methods of weaving.

The silk industry in East Bengal is also of considerable importance. Caps, turbans and curtains are embroidered in silk. Women of the upper classes also do embroidery. Silk thread is used even on cotton material. On the cloth the outlines of designs are block printed. In West Punjab we find "Phulkari" work which is embroidery done with silk thread in multifarious colours on thick cotton material. In Sind the same style of embroidery is practised and is known as "Makrani" embroidery. Silk spinning and weaving are fairly important industries at Kohat and Peshawar, where silk turbans are woven.

Copper-ware is one of the specialities of Peshawar. It is mostly hammered work, the patterns being engraved and often loaded with lac.

Metal work is done throughout Pakistan and consists of work in brass, bell-metal, copper, iron, gold and silver. In some cases it is a medium scale industry with paid labour. Machine-rolled metal sheets are used by way of raw material. Gold and silver are worked from bars. Rest of the work is done by hand. The tendency to employ machinery for this purpose is on the increase. Products consist of household articles, *e.g.*, pans, pots, tumblers, vessels etc.

Wood-work of Pakistan ranges from simple photo frame to up-to-date furniture Occasionally one sees exquisite carvings on furniture, windows, screens and doorways. The standard of carpentry is high. Designing, however, needs improvement.

Tanning and leather goods form an important item of the cottage industry. Along with rough and partial tanning there is high class tanning and chrome leather manufacture. The Provincial Departments of Industries have leather goods sections which train students in scientific methods of tanning, manufacture and designing. Glue-making is a side industry of tanneries.

The village potter is a familiar figure throughout Pakistan. The chief raw materials used are clay and sand. They are baked in a kiln, which burns any available cheap fuel. The primitive potters' wheel is still being used.

Paper making is a supplementary occupation. Some of those engaged in agriculture during the summer and the rainy season get busy with paper making in the winter. Raw materials used are waste paper cuttings from book binders, as well as rags, old gunny cloth, fibres and old fishing nets. The three popular varieties of paper are document, kite and blotting paper. This industry is on a small scale.

Bangles, combs, necklaces, caskets, buttons, paper-weights are made of ivory in East Bengal. Ivory work is also done at Lahore by means of simple tools.

The conch-shell work is done at Dacca. Buttons, bracelets, bangles, chains, rings and small images are made out of conch-shell.

The North-West Frontier Province has a peculiar art craft known as the Afridi Wax Work. Designs are worked on cloth by means of a kind of wax known as "Roghan". The most popular and traditional designs are flower-baskets, dragons, peacocks, and the Persian Tree of Life.

Industrial Co-operatives in the form of Primary Societies and Unions have given an impetus to cottage industries. The Unions extend technical advice and marketing facilities to the primaries and also provide them with necessary raw materials. The Unions which are only of limited liability are situated at the important weaving centres. They encourage collective production and disposal of goods. The Unions finance the affiliated primary societies and organise co-operative societies among weavers.

CHAPTER XVI

INDIAN INDUSTRIAL LABOUR

The Migratory Character of Industrial Labour :—India has not yet developed an Industrial Proletariat in the Western sense because in the West industrial workers are completely divorced from land and constitute a class by themselves. They are normally born and brought up in cities and this accounts for their comparative superior efficiency as compared with Indian confreres. The majority of Indian industrial workers is recruited from villages and they do not usually sever their connection with villages. India's industrial workers are largely recruited from agriculture or village crafts. These workers engage themselves in factories with a view to shift back to villages again at the earliest opportunity. They are essentially brought up in rural atmosphere and do not find factory environment congenial. Even after migrating from villages, they maintain close contacts with villages, where they normally have their own houses. They very often leave behind in villages their family and relations, with whom they maintain close touches. They go back to villages during holidays. Most of them have only indirect interest in agriculture in so far as they may be members of a joint-family owning land in villages.

As these workers come from villages, they usually lose their health in slum surroundings of city life and they try to return to village life, to which they are adopted. Indian workers in consequence generally view their industrial occupations as a stop gap and do not develop any permanent interest in their work. This is one of the major causes of inefficiency of Indian labour. It very often happens that a worker after learning his trade goes back to the villages for good and every effort spent on training is lost. This migratory character of a worker also accounts for large absenteeism. A worker returns to his village leaving a factory, and, when he returns he finds it difficult to get the same job and in consequence lives in distress following unemployment.

The Indian Labour Commission thought that this agricultural recruit system is not without some benefits for both towns and villages. The village homes of workers act as an insurance against

unemployment and sickness. Just as towns help in reducing the pressure on land by absorbing agriculturists in employments, villages equally are helpful whenever there is industrial depression. The fact that workers usually hail from villages means that workers are recruited in a healthy condition and villages always provide workers with opportunities of leisure and recuperation of health. The Labour Commission therefore emphasised to maintain this rural contact, which should be encouraged and regularised.

The question naturally arises that if this migratory character of Indian labour is continued, how will it be possible to build up a permanent and efficient labour force. The answer to this will be clear if we analyse the causes of migration from villages. The landless agricultural labourers are hit hard by agricultural distress and they migrate to towns in search of work to earn their livelihood. In some areas the pressure on land is so great that agricultural holdings become uneconomic and compel the agriculturists to go to towns to make a living. Cases are frequent where members of a joint-family migrate to towns, leaving other members on land. There are village menials, who often shift to towns to better their prospects. It is therefore clear that village folk go to industrial occupations by sheer force of economic circumstances. They do not take to industrial life, because they are neither attracted by the emoluments of an industrial occupation nor do they want to pursue an ambitious career. The Labour Commission very aptly remarked that the driving force in migration comes almost entirely from one end of the channel, that is, the village end. The industrial worker is not prompted by the lure of city life or by any great ambition. The city, as such, offers no attraction for him and, when he leaves the village, he has seldom an ambition beyond that of securing the necessities of life. Few industrial workers would remain in industry if they could secure sufficient food and clothing in the village.

The remedy therefore lies in rendering industrial occupations sufficiently attractive by better housing, sanitation and welfare measures of various kinds. This will help to establish a permanent and contented labour force.

The Lack of Industrial Labour :—Although the position became a little easier from 1925 following improved housing,

better working conditions in factories and welfare measures, Indian industries have always felt the scarcity of labour. The supply of technical and skilled personnel is particularly limited due to lack of facilities of technical training and general apathy of the educated community to manual work.

The absence of a suitable labour recruiting organisation is also a contributory cause of shortage of workers. Formerly labourers for Assam tea gardens were recruited by contractors, going round the countryside. Most of the factories and mills in India have as yet no method of recruiting labour directly. The workers are usually recruited through the foreman or jobber. The jobber is even now an essential link between the workers and employers. As he is the main source of employment, the prospective workers more often than not bribe him for securing a job. Even women workers are oppressed by the overseers. Although the Bombay cotton mills have introduced the system of women overseers, they are as corrupt as men. A jobber usually exercises a great influence upon workers by lending them money and actively interfering in the daily lives of the labourers. The jobber controls appointment, promotion and dismissal. As the jobber takes bribe on every new appointment, he is always interested in shifting workers from one factory to another. This jobber system is a positive evil and should be eliminated by direct recruitments. The jobber should be precluded from all influences in connection with promotion, leave or dismissal. It is gratifying to observe that large industrial establishments are gradually dispensing with the jobber system by appointing their own Labour Welfare Officers, who are entrusted with the task of recruiting labour and looking after their welfare. The Employment Exchanges operated by the Government throughout several parts of the country have also helped direct recruitment. The introduction of regular leave and holiday allowances under various labour laws and Tribunals' awards has also eliminated to a considerable degree the influence of jobbers and has been assisting to build up a contented working class.

Systems of Wage Payments :—The systems of wage payments widely differ from place to place and industry to industry. Different systems are even found in the same establishment. In most Bombay mills, wages are paid once a month, usually on the

fifteenth of the month following the one for which wages are earned, so that a new recruit has to wait for six weeks before he can get his wages. This is a source of hardship and accounts for a large part of the indebtedness of the factory population. In the Calcutta jute mills, weekly wages are paid and only a week's wages are held back. In Ahmedabad, wages are paid weekly, or at intervals of fourteen to sixteen days. In order to bring about a uniformity in wage payment, the Payment of Wages Act was passed in April, 1936 and it provides that no wage period shall exceed one month, that all wages must be paid in coin and/or currency notes, and that the wages of any person employed upon or in any railway, factory or industrial establishment employing more than 1,000 persons shall be paid before the expiry of the seventh day and in any other railway, factory or industrial establishment, shall be paid before the expiry of the tenth day, after the last day of the wage period in respect of which the wages are payable. The Payment of Wages Act also aims to regularise and restrict deductions from wages. Deductions from the wages of an employed person are restricted to fines; deductions for absence from duty; deductions for damages to or loss of goods expressly entrusted to the employed person for custody, or for loss of money for which he is required to account, where such damage or loss is directly attributable to his neglect or default; deductions for house-accommodation provided by the employer; deductions of subscriptions to, and for repayment of, advances from any provident fund, etc. Although fines have been severely restricted by this Act, the employers usually circumvent the Act by compelling workers to go on leave without pay and by introducing differential rates of wages, etc.

Inefficiency of Indian Labour :—Although there is scope for increasing the efficiency of Indian labour, it is at present inefficient as compared with its Western confrere. The comparative inefficiency is due to certain basic as well as remediable causes. The climatic conditions in India are averse to a high degree of efficiency. Thus, for example, Lancashire workers have got an invigorating climate, while artificial humidification of Bombay cotton mills is injurious to workers' health and efficiency. The physique of an average Indian worker is below standard due to diseases and poor diet. There lies a great scope for improvement in this direction by organising public health and hygiene, adopt-

ing good principles of sanitation and ventilation and establishing scientific draining systems.

Absenteeism is an outstanding feature of Indian labour. It is generally found that workers are not ambitious and they always absent themselves from work if they have just enough to make both ends meet. In addition, it has been observed that absenteeism tends to increase during hot months, as labourers find it very trying to work during summer season. The Textile Tariff Board suggested the formation of labour reserves, which would make a casual transfer unnecessary. Long hours of work before the passing of the Factory Act were also responsible for absenteeism and loitering. Although it is true that Indian workers are not adaptable to sustained labour, long hours and uncongenial environment usually accentuate habits of loitering. It has been found in practice that this defect has been largely corrected in Calcutta jute mills and engineering workshops by introducing shift systems of work.

Most of these defects arise from the trying conditions of work in mills and factories, and a good deal of improvement can be effected by paying attention to ventilation, meals, bathing and latrine accommodation, etc. The artificial humidification introduced in Bombay mills has been found to be baneful from the standpoint of workers' health and steps should be taken to improve the prevailing practice of artificial humidification.

Bad housing arrangements, overcrowding in slums and terrible conditions of sanitation have rendered India's industrial life look like hell. Workers in consequence not only detest factory life, but at the earliest opportunity they leave factory for village. This accounts largely for the instability of the Indian labour force and has also been one of the major factors of industrial unrest and discontent. It has been rightly said that, "Good houses mean the possibility of home life, happiness and health; bad houses spell squalor, drink, disease, immorality, crime, and in the end demand hospitals, prisons and asylums in which we seek to hide away the human derelicts of society that are largely the results of society's own neglect". The slums have been found to be veritable graves of infants.

The problem of housing industrial workers is very complex and depends for its solution on available space, finances, management, workers' sense of citizenship, etc. In spite of all these

difficulties, there must be an overall improvement in industrial housing before India can aspire to build up an industrial organisation on peaceful foundations.

It is true that certain employers are fully alive to this pressing problem and have been trying to provide good housing accommodation for their workers. In most cases, however, the employers are handicapped by lack of adequate space. The Labour Commission therefore suggested that the Land Acquisition Act should be amended to enable owners of industrial concerns to acquire land for the erection of workers' dwellings and accordingly, the Act was amended in 1933 on the initiative of the Government of India. Provincial Governments should undertake a survey of urban and industrial areas to ascertain the needs in regard to housing and arrange for mutual consultations for devising practical plans of co-operation among all interested parties. It is desirable that the Government should lay down minimum standards regarding cubic space, ventilation, lighting, watersupply, drainage etc. Suitable town planning Acts should be enacted if necessary, and the provision of working-class housing should become a statutory obligation on every Improvement Trust. Co-operative building societies ought to be encouraged and municipalities should revise, bring up to date and enforce rigorously by-laws dealing with health, housing and sanitation.

The problem of housing is so difficult that it should be tackled by employers in collaboration with the Government. It is therefore gratifying to observe that the Government of India has agreed to finance housing schemes of the Provincial Governments and the Government of Bombay is already doing commendable work in this direction.

It is therefore gratifying to observe that the Government of India has formulated a new industrial housing scheme for the construction of 1 million houses for workers in the course of the next 10 years which is by far the biggest plan of construction ever undertaken in India, and is also one of the biggest of its kind in the world, involving a capital expenditure of no less than Rs. 300 crores.

Under the finalized scheme, the 1 million houses would be distributed as follows among the various industries: Factories 725,000; plantations a little less than 200,000; and docks etc. 300,000 to

400,000. A beginning was to be made with housing for factories and plantation labour.

The Government of India have already circulated the scheme of industrial housing to the Provincial Governments. The Centre is anxious that the scheme should commence immediately, so that the target of "1 million houses in 10 years" may be achieved.

Central and regional housing boards will be set up to execute the scheme.

Under the scheme, the capital required for industrial housing will be provided to the extent of two-thirds by the Central Government and one-third either by the Provincial Government or the employer sponsored by the Provincial Government. The Centre will not grant any subvention to the Provinces for this purpose. The capital provided by the Central Government will be given free of interest but the Provincial Governments will be required to build up a sinking fund.

The employer's contribution will be in the form of rent for the quarters occupied by workers at a rate not exceeding 3 per cent of the total capital cost. The employees' contribution will be the rent at the rate of 20 per cent of his wage, subject to 2½ per cent of the capital costs. This rent will be in force for five years, after which it will be reconsidered. The Provincial Government's share of the financial burden will be the residual amount.

The scheme has been so worked out that the only loss to the Provincial Government will be where there is a shortfall in the realization of rent. This difficulty is expected to arise only in Bombay and Calcutta, where the annual loss to Provincial Governments on each quarter is estimated at Rs. 19-8 in Bombay and Rs. 54-8 in Calcutta on the basis of the workers' contribution. In other centres like Ahmedabad, Cawnpore, and Delhi no loss would be incurred.

A separate scheme for building 50,000 houses for coalminers is already being worked in the coalfields. The railways have their own building programme.

Wages in India :—The question of wages has been a bone of contention and hanging fire in the industrial world since the inception of the modern industrial age. Nearly all industrial disputes centre round this problem of wages. The workers feel and contend that they are always paid less than their worth while

employers argue that wages must be paid according to efficiency. Bereft of all controversies, it is a fundamental concept in practical economics that wages are the result of production and must be determined by productivity. This is an inescapable conclusion and no employer will continue to run his show if he finds that he has to pay to workers more than what he can ultimately receive from them in terms of concrete products.

During recent years, there has been a complete change in India on the Wages Front. Wages have risen steeply in this country since World War II and it is estimated that they now form about 22·64 per cent of total output. On the other hand, production per worker has failed to respond proportionately and has actually dropped in several instances. Complaints are already being made that industries cannot afford to bear prevailing high rates of uneconomic wages. High wages unaccompanied by corresponding rises in efficiency are already being reflected in high prices of Indian commodities to the detriment of local consumers and loss of foreign markets. It is true that the efficiency of the Indian workers can be partly stepped up by improved technique and rationalisation of production but the scope is rather limited in that way. It is now an onerous responsibility of the working class to realise the dangers inherent in prevailing economic conditions and they must rise to the occasion and justify high wages by increasing their efficiency in co-operation with the management.

In spite of a steep rise in wage bills of industries, there is hardly any mentionable improvement in workers' standard of living. This is due firstly to the fact that a worker lives in a joint-family, which is often run by a single earning member, and in consequence he spends the major part of his income on food, following high prices. It is estimated that food alone absorbs over 50 per cent of a worker's total expenditure. His shelter is poor, clothing scanty and education almost nil. Secondly, most of the workers spend invariably about 6 to 10 per cent of their incomes on drinks. It is gratifying to observe that this evil of drink is being effectively tackled by the introduction of prohibition, to which Congress is pledged. The workers in addition are invariably in debts and are compelled to pay regular interests to money lenders. It is estimated that about 70 per cent of the workers normally incur debts. It has been rightly said that the worker would benefit if his attractiveness as a field of investment were reduced

and if it were made unprofitable for the money-lender to advance amounts, which are beyond the capacity of the worker to repay. The Labour Commission proposed that the salary and wages of all workmen receiving less than Rs. 300 per month should be exempted from attachment, as also workers' contributions to bona fide provident funds. The Government of India have accordingly amended the Civil Procedure Code with a view to exempting from attachment salaries below a specified limit. It is also suggested that arrest and imprisonment should be abolished in the case of an ordinary industrial worker, unless he is proved to be able and yet unwilling to pay and that summary procedure should be instituted for the liquidation of a worker's unsecured debts and the Courts empowered to adjust the amount of the decree to the ability of the worker to pay without undue hardship. The Cawnpore Labour Enquiry Committee recommended a measure on the lines of the Central Provinces Protection of Debtors Act, 1937 in order to protect the indebted worker. This Act renders molestation of a debtor a cognizable offence. There prevails a more restricted Act in West and East Bengal. The provision of co-operative credit appears to offer a more lasting solution of the problem.

Although wages have risen in major industrial establishments during recent years due to labour-capital negotiations and various Tribunal awards, there are several industries which sweat their workers. In order to ensure the payment of fair wages, attempts and suggestions have been made from time to time. The Bombay Textile Labour Enquiry Committee was appointed to make recommendations regarding the establishment of a minimum wage and methods of automatic adjustment of wages in future. It submitted its Report in July, 1940. The Cawnpore Labour Enquiry Committee endorsed the principle of a basic minimum wage, and recommended that no worker should receive a wage of less than Rs. 15 per month of 26 working days. They also recommended the establishment of a Wage Fixation Board to function on the lines of the British Trade Boards for the adjustment of wages from time to time on the basis of the minimum cost of living. The Bihar Labour Inquiry Committee, appointed in 1938, reported in June, 1940 and made several recommendations for improving the conditions of labour in the province. The Central Pay Commission of 1947 recommended a new pay

structure for Government servants from the highest to the lowest. It proposed that the maximum salary should not be more than Rs. 2,000 per month and that the lowest salary should not be less than Rs. 30 per month. The recommendations of this Commission are likely to influence the policy of wage fixation throughout the country. It is gratifying to note here that the Government of India has now passed minimum wages legislations in different industries and the Government expressed its desire to pass similar legislation for agricultural labour. The effect of a minimum wage has already been substantially implemented in practice by the awards of various Tribunals, which laid down the minimum wage payable as well as the scales of promotion, including rates of leave-bonuses, pension, etc.

Factory Legislation in India :—It is an irony of fate to observe that the genesis of factory legislation in India began from the agitation of Lancashire. Lancashire manufacturers urged for such laws not motivated by any principles of philanthropy, but they were actuated by the selfish motive of placing handicaps on Indian industries. A Factory Commission was in consequence appointed by the Bombay Government in 1875 and the Factory Act of 1881 was modelled on their recommendations. The Act prohibited the employment of children below the age of seven. Between that age and twelve, they were not to work exceeding nine hours a day. An hour's daily rest and four holidays in the month were prescribed for children. No relief, however, was given to women and adult male labourers. The Act applied to factories employing not less than a hundred persons and using power. Local Governments were asked to appoint Inspectors of Factories.

This did not satisfy the Lancashire manufacturers, who wanted a more stringent legislation and so the Factory Act of 1891 was passed. The Act covered all establishments, using power and employing not less than fifty persons. The local Governments were empowered to extend it to others, employing not less than twenty persons. The lower and upper age limits for children were raised to nine and fourteen respectively. Their hours of work were limited to seven per day and had to be between the hours of 5 a.m. and 8 p.m. Restrictions were placed on the employment of women. They were prohibited from working in

factories before 5 a.m. and after 8 p.m., except in places where an approved system of shifts existed. Their hours of work were restricted to eleven per day, entitling them to a total rest of one and a half hours. Men workers were to enjoy an interval of half an hour's rest between 12 noon and 2 p.m. and a weekly day of rest. Provisions were also made to secure better ventilation and cleanliness and they aimed at preventing overcrowding in factories.

The Lancashire manufacturers continued to carry on propaganda, which was supported by the Indian Press and by some Indian employers and this led to the appointment of another Commission, which submitted its report in 1908. The Factory Act of 1911 was in consequence passed and provided that all seasonal factories working for less than four months in a year were to be brought within the orbit of the Act. It made compulsory the possession of an age certificate. The hours of work for children in textile factories were reduced to six per day. The Act restricted the employment of women during night, which was only allowed in the case of cotton ginning and pressing factories. The hours of adult male workers were restricted by law for the first time, the limit being twelve hours per day in the case of only textile factories. It provided in addition that in all textile factories, except those working with an approved system of shifts, no person was to be employed before 5 a.m. or after 7 p.m. Expensive provisions regarding health and safety were introduced and factory inspection was rigidly enforced.

Then the Factory Act of 1922 was passed and this was inspired for the first time in India by the demand of Indian workers. Industries expanded rapidly since World War I and there was a phenomenal rise in India's population. The workers felt the distress of high prices and consolidated their position by co-operation amongst themselves. The World War I brought about a consciousness and awakening among the industrial workers in this country. By the Factories Act of 1922, all power-using factories employing not less than twenty persons came within the orbit of factory legislation. Option was given to the local Governments to extend it to factories employing not less than ten persons. The minimum age for child employment was raised to twelve and the upper limit to fifteen. Children between these ages were not to work for more than six hours a day in any factory. Children and women were not to be employed in any

factory before 5-30 a.m. and after 7 p.m. The hours of work for adults were restricted to sixty a week and eleven a day, a week consisting of not more than six days. Liberal rest intervals were also provided for all workers. The Act provided for a rest period of one hour after every six hours, though this might be split up into two half-hours at the request of the employees, provided not more than five hours' continuous work was done. The system of inspection was further tightened by the appointment of a large number of whole-time inspectors with good technical qualifications in the principal industrial centres. Provisions regarding safety and health were further extended and local Governments were empowered to fix standards of ventilation and artificial humidification.

The Factories Act of 1922 was amended in 1923, 1926, and 1931. Certain administrative difficulties were thus removed and a few improvements of minor character were introduced. A new consolidating Act was passed in 1934 on the recommendation of the Labour Commission and brought into force from 1st January, 1935. This Act makes a distinction between seasonal and perennial factories and introduces a third group of adolescents (over fifteen and under seventeen years of age, deemed to be children if not certified as fit for adult employment). The prevailing maximum limits of eleven hours per day and sixty hours per week continue to apply in the case of seasonal factories but are reduced to ten and fifty-four respectively in the case of perennial factories subject to certain exceptions. The maximum hours for children everywhere are fixed at five hours per day. The principle of 'spread-over' is introduced for the first time by enacting that the period of the number of consecutive hours of work is limited to thirteen in the case of adults and seven and a half in the case of children. The existing provisions regarding control of artificial humidification are expanded. The Act also empowers local Governments to authorise an Inspector to call upon managers of factories to carry out specific measures for increasing the cooling power of the air if necessary. Provisions have been made for welfare, *e.g.*, adequate shelters for rest in factories, rooms reserved for the use of children and female workers, first-aid appliances etc. Local Governments are also entitled to make rules prescribing fitness and preventing the employment of children not certified as fit. Inspectors are authorised to require managers to remedy any

inadequacy or defect in the construction of a factory which is likely to be dangerous to workers. Restrictions are placed on the overtime which can be worked and the payment for overtime is regulated. The Factories Amendment Act lays down a 48-hour week in all perennial factories. Provincial Governments are, however, given powers to extend this limit, if necessary, in the interest of the public.

The Tea Districts Emigrant Labour Act of 1932 :—Recruitment and other matters regarding plantation labour are governed by the Tea Districts Emigrant Labour Act. This Act, passed in 1932 and based on the recommendations of the Labour Commission, repeals the Assam Labour and Emigrant Act, 1901 and the subsequent amending Acts. The Act of 1901 aimed at regulating the system of indentured labour for tea plantations in that province introduced in the thirties of the last century. The Amendment Act of 1915 abolished the system of recruitment by licensed contractors, which was introduced by the former Act. Thereafter recruitment could be made only through the agents of the official Labour Board. The Act of 1932 aims at exercising controls over the recruitment and forwarding of assisted emigrants to the Assam tea gardens that may be justified and necessitated by the interests of emigrants and potential emigrants. It also seeks to ensure that no unnecessary restrictions are imposed. Local Governments are empowered, subject to the control of the Government of India, to impose control over the recruitment and forwarding of assisted emigrants. Employers are prevented from recruiting otherwise than by means of certified garden sircars or licensed recruiters. It is made illegal to assist persons under the age of sixteen to emigrate unless they are accompanied by their parents or guardians. Regarding the question of repatriation, every emigrant labour, on the expiry of a period of three years from the date of his entry into Assam, has the right of repatriation as against the employer, engaging him at such expiry. It is also possible to claim repatriation within three years in the event of the emigrant deteriorating in health, not being provided with suitable work, or having his wages unjustly withheld or for any other sufficient cause.

Provision has also been made for the appointment of a Controller of Emigrants in order to supervise the general adminis-

tration of the system, which the Act seeks to establish. The charges are met from an annual cess called the Emigrant Labour Cess, which is imposed at a rate not exceeding Rs. 9 per emigrant as the Governor-General may, by a notification in the Gazette of India, determine for each year of levy.

It may be noted that the existing constitution confers concurrent jurisdiction in matters of factory legislation on Centre and Provinces. This endangers uniformity of factory laws throughout the country. The Central Provinces Unregulated Factories Act of 1937 applies the main provisions of the Factories Act to unregulated factories engaged in bidi-making, shellac manufacture and leather tanning. The Bombay Government extended the operation of certain clauses of the Factories Act to several unregulated factories in 1939. Different Provincial Governments also granted exemption to various factories from the operation of the Factories Act regarding hours of work during World War II.

Labour Legislation for Mines :—The first Indian Mines Act was passed in 1901 and inspectors were appointed. Then a revived legislation was passed in 1923 in order to cope with the expanding industry. After defining a mine, the Act restricted the hours of work to sixty per week for workers above ground and fifty-four for workers underground, a week consisting of six days. No child was permitted to work below ground and a child was defined as a person under the age of thirteen years. There was no restriction on the employment of women underground. The Government of India however framed regulations in 1929 to exclude women from underground workings forthwith, except in coal-mines of Bengal, Bihar, Orissa, Central Provinces and salt-mines in Punjab. The same provision was to be gradually applied to the latter mines, so that after 1st January, 1939 no woman should be employed in underground workings. The ban on the employment of women underground was temporarily suspended in 1943 in order to step up war-time production.

As the Indian Mines Act of 1923 did not place any statutory restrictions on the daily hours of work, the Legislature passed an amending Act in March, 1928, which provided that no mine was allowed to work for more than twelve hours out of twenty-four through the same set of workmen. Owners were required to put

notices outside the offices stating the hours of work and the number of workmen. The Amending Act of 1935, was passed on the recommendations of the Royal Commission on Labour and largely influenced by the Draft Convention adopted by the Fifteenth Session of the International Labour Conference. No person is allowed to work in a mine for more than six days a week. A person employed above ground in a mine is not allowed to work for more than fifty-four hours a week or for more than ten hours in any day. The periods of work of any such person are so arranged that, along with his intervals for rest, they are not in any day to spread over more than twelve hours and that he is not to work for more than nine hours on any day. Work of the same kind is not to be carried on below ground in any mine for a period spreading over more than nine hours in a day except by a system of relays so arranged that the periods of work for each relay are not spread over more than nine hours. The employment of children under fifteen years of age is prohibited.

Conditions of employment in mines are also regulated by the appointment of Mines Boards of Health which look after the health of the workers. A Board is entitled to compel the owners of mines to provide housing, water-supply, sanitary facilities and medical help.

In spite of these legislative measures, working conditions in mines continued to be unsafe. There were a series of colliery disasters and in consequence an expert committee was appointed in 1937 to investigate into the causes of such catastrophies. The Government of India therefore passed the Coal Mines Safety Act of 1939, providing for the safety of mine workers and sand-stowing is being encouraged with financial aid from the state to eliminate accidents in collieries. The Act also provides for the levy of an excise duty on coal and coke in order to constitute a fund for granting assistance to colliery owners for purposes of stowing. The Act was further amended in 1940 to allow finances to be spent from the Coal Mines Stowing Fund for extinguishing fires in mines and for adopting other protective measures.

Labour Legislation for Railways :—All railway workshops are covered by the Factories Act of 1922, but the Indian railways employ about a quarter of a million workers in other occupations in which hours of work, etc., were not controlled until recently.

The Indian Railway (Amendment) Act of 1930 implemented in practice the Government's statutory obligations under the International Labour Conventions. A railway employee can no longer be employed for more than sixty hours a week on the average in a month. A railway servant with intermittent employment cannot be engaged exceeding eighty-four hours in a week. Temporary exemptions however may be made from the above provisions in emergencies involving serious interference with the ordinary working of the railways and in cases of exceptional pressure of work, overtime being paid. A weekly rest of a full twenty-four hours is prescribed, subject to temporary exemptions as stated above. Compensatory periods of rest for the period forgone must be granted. The Governor-General may appoint supervisors of railway labour to inspect railways in order to ensure the working of the above provisions of the Act.

The Workmen's Compensation Acts :—The right of a worker to compensaton for accidents in course of employment has been fully recognised in Western countries, while it has made slow progress in India. In 1884, Bombay workers demanded such compensation and a certain number of enlightened employers introduced a system of compensation voluntarily. Before the passing of the first Workmen's Compensation Act in 1923, an employer could be sued under the Fatal Accidents Act of 1885 in case of death, following an accident, but it was rarely invoked.

The underlying principle of the Act of 1923 was that compensation should ordinarily be given to workmen who had sustained injuries by accidents arising out of and in the course of employment, compensation being also given for diseases under certain circumstances. The scope of the Act was widened by amending Acts of 1926, 1929, 1931 and 1933, following partly the ratification by the Government of India of the draft convention regarding workmen's compensation of occupational diseases adopted by the Seventh International Labour Conference of 1925 and partly the recommendations made by the Royal Commission on Labour in 1931. Certain minor amendments of a technical character were introduced in 1939.

The Act of 1933 covers railways, tramways, factories, mines, seamen, docks, persons employed in the construction, demolition or repairs of certain buildings or of roads, bridges and tunnels,

marine works, operations relating to telegraph, telephone, or overhead electric line, blasting operations or excavations, boat services, lighthouses, tea, coffee, rubber or cinchona plantations, electricity or gas generating stations, cinematograph workers, salaried motor drivers and underground sewage workers. Persons employed in administrative or clerical capacities and persons whose monthly earnings exceed Rs. 300 are excluded. The Act covers over seven million industrial workers in the country.

The amount of compensation payable depends on the average monthly earnings of an injured or deceased workman. The amounts of compensation payable in the case of an injured workman whose monthly wages are not more than Rs. 10 are Rs. 500 for death, Rs. 700 for permanent total disablement and half the monthly wages for temporary disablement. In case of a workman whose monthly wages are between Rs. 50 and Rs. 60, the corresponding figures are Rs. 1,800, Rs. 2,500 and Rs. 15 respectively. The maxima for persons earning over Rs. 200 per month are Rs. 4,000, Rs. 5,600 and Rs. 30 per month respectively. In the case of minors the compensation for death and permanent total disablement are at a uniform rate of Rs. 200 and Rs. 1,200 respectively, and half the monthly wage for temporary disablement. No compensation however is payable regarding a waiting period of seven days following that on which the injury was caused.

The dependants to whom the amount of compensation is payable are firstly those who are actually dependent, *e.g.*, wife or minor children and secondly those who may or may not be really dependent, *e.g.*, husband, parent other than widowed mother, etc. The interests of dependants, in cases of fatal accidents, are safeguarded by ensuring that such accidents should be brought to the notice of commissioners appointed under the Act by Provincial Governments.

The administration of the Act and the settlement of disputes thereunder are entrusted to these commissioners, who have been vested with wide powers. The procedure is simple and opportunities for appeals are restricted. In order to make reliefs effective it is necessary to arrange rapid inquiries by medical men capable of forming estimates of the injuries received, along with the enlistment by the State of impartial judges to see that the worker gets the benefit in due course. The migratory habits of the industrial

worker, his ignorance of the financial benefits due under the Act and lack of qualified men to put up properly the workman's case for compensation are among the factors, which make the operation of this kind of measure rather difficult in India. The Workmen's Compensation (Amendment) Act, 1946, raises the maximum limit of earnings on which compensation is payable from Rs. 300 per month to Rs. 400 per month.

The Bombay Shops and Commercial Establishment Act of 1939 :—Bombay pioneered the passing of the above Act, which regulated hours of work in shops, commercial establishments, restaurants, theatres and other establishments. Similar legislation was passed in 1941 in Bengal, Punjab and Sind. In West Bengal it is now compulsory to allow 1½ days' holiday a week to shop assistants.

Social Insurance Legislation in India :—Insurance against sickness, unemployment and old age for industrial workers has been introduced in almost all civilised countries. The International Labour Organisation stressed the importance of such a measure from time to time and India started to think seriously in terms of social insurance after the tenth International Labour Conference adopted a convention in 1927 in regard to sickness insurance for industrial, agricultural and domestic workers.

The Royal Commission on Indian Labour also fully discussed this question of social insurance and the Government of India appointed in March, 1943, Professor B. P. Adarkar to frame a suitable scheme of sickness insurance for industrial workers in India.

The Government of India has passed the Social Insurance Act of 1948, providing for certain benefits in case of sickness, maternity, unemployment and injuries. The administration of the scheme has been entrusted to a Corporation, which will work through a Central Board, consisting of representatives of the Assembly, employers, workers and medical profession. The insurance fund will be mainly derived from contributions of employers and employees. A worker's share will be based on average wages and will be paid in the first instance by the employer, who will be entitled to recover it from wages. Employers will pay contributions of all workers, whose wages do not exceed ten annas a day. Although the Act applies to industrial workers only, the

Government has expressed the hope of extending its scope to cover other workers in due course.

Maternity Benefit Legislation :—The Internal Labour Conference adopted a draft convention in 1919, emphasising the need for granting rest and maternity benefit to expectant mothers, who are employed in industries. The Labour Commission also recommended such a scheme for India. Maternity Benefit Acts have been passed by various provinces, *e.g.*, Bombay, Central Provinces, United Provinces, Madras, Delhi, Bengal, etc. The maximum benefit period extends from eight annas a day to the average daily earnings of the workwoman concerned.

Industrial Disputes in India :—Industrial disputes in India as well as elsewhere centre mainly around the question of wages. Among others, bad housing, long working hours, oppression of workers by jobbers and foremen, etc., are principal contributory causes.

Although there were a few industrial strikes in 1905 especially in Bombay, labour unrest took a concrete shape from World War I. Industrial strikes became frequent and took a serious turn from 1917 owing to high prices and the growth of consciousness among labour ranks. Industrial disputes averaged between 118 to 406 during 1920-39 and were largely confined to cotton and woollen mills. The economic depression before the thirties of the present century brought about an outburst of strikes, following cuts in wage emoluments. The strike situation in India was serious in 1928 and was engineered by communist influences and the strike fever prevailed chiefly in cotton mills and the iron works at Jamshedpur.

The economic depression after 1930 led to further labour troubles in Bombay cotton mills, which were obliged to adopt wage cuts and retrenchment. This prompted the Bombay Government to institute a Departmental enquiry, the result of which was published in 1934 and in consequence the Government of Bombay passed the Trade Disputes Conciliation Act. Strikes became very frequent from 1937 and spread throughout the country and it is estimated that 1937 and 1938 witnessed about 379 and 399 industrial disputes, respectively. The Congress Ministries of Bombay, Central Provinces, United Provinces and Bihar conducted labour enquiries during 1937-38.

The Indian labour unrest continued to mount up since the World War II and in 1946 the number of strikes rose over 694. In addition to the economic phenomena of high prices and increased costs of living, social and political influences began to play important roles in labour troubles.

Industrial Disputes Legislation :—It has been recognised that measures should be adopted to prevent industrial disputes and this can be achieved if labour and capital can meet together and discuss matters with authority through representative organisations. In India employers are well organised, but labour requires to be consolidated by developing genuine Trade Unions, which represent workers' interests.

A permanent Arbitration Board has been set up for the settlement of disputes in the textile industry in Ahmedabad. The Bombay Industrial Disputes Committee of 1922 and the Labour Commission recommended the formation of Works Committees or Shop Committees on the lines of the Whitley Committees in England. The workers would be represented on these committees along with the employers and would be responsible for the fixing and observance of conditions under which work is to be carried on. These committees have already been established by enlightened employers like Tatas and by the Government in their capacity as employers.

The Government of Madras set up Courts of Inquiry to deal with individual disputes as they arose. The Committees appointed by the Governments of Bengal in 1921 and Bombay in 1922 made valuable spade work in this direction and suggested detailed recommendations regarding the machinery to be set up for preventing and settling industrial disputes. The Government of India held that the subject required all-India legislation. The Trade Disputes Act, passed in 1929 initially for a period of five years was made permanent in 1934.

The Trade Disputes Act of 1929 :—The Act does not provide for compulsory arbitration. The underlying principle of the Act is to help the clear framing and discussion of the issues involved by an impartial tribunal in order to help the formation of the right public opinion. The Act provides for the establishment of Courts of Inquiry and Conciliation Boards.

The Act authorises the Provincial Government or the Governor-General, where the employer is the head of a department under the Governor-General or a railway company, to appoint, for the prevention or settlement of a dispute, a Court of Inquiry or Board of Conciliation, as the case may be, where both parties to the dispute apply, whether separately or conjointly, provided the persons applying represent the majority of each party.

The Court of Inquiry consists of an independent chairman and such other independent persons as the appointing authority may think fair or it may consist of one independent person.

The Board of Conciliation has a different constitution and consists of a chairman and two or four other members as the appointing authority thinks fit or it may consist of one independent person. The chairman is an independent person and other members may be either independent persons, or persons appointed in equal numbers to represent the parties to the dispute on the recommendations of the parties concerned.

The function of such a Board is to attempt to bring about a settlement after investigating the merits of the dispute, to persuade the parties to arrive at a fair and amicable settlement and afford them reasonable time for doing so. Failing to bring about a settlement, the Board is to send a full report to the appointing authority, giving the proceedings and the steps taken by the Board for the settlement of the dispute together with its findings and recommendations. The appointing authority is to publish the report, final or interim, as soon as possible after its receipt.

The provisions in the second part of the Act regarding public utility service means any railway service so declared for the purposes of the Act by the Governor-General, any postal, or telegraph or telephone service, any business or undertaking which supplies light or water to the public and any system of public conservancy or sanitation. Special penalties are prescribed for employees, engaged on monthly wages, in such services in the event of their going on strike in breach of contract without having given to their employer, within one month before so striking, not less than fourteen days' previous notice. Employers carrying on such public utility services are liable to be penalised for locking-out their employees without a similar notice. Abettors of the

above offence are to be dealt with under the ordinary Criminal Amendment Law.

There are special provisions regarding illegal strikes on the lines of the British Trade Disputes Act of 1927. A strike or lock-out is to be regarded as illegal, which has any object apart from the furtherance of a trade dispute within the trade or industry in which the parties to the dispute are engaged and is designed or calculated to inflict severe hardship upon the community and thereby to compel the Government to take or abstain from taking any particular course of action. Any sums collected or applied in direct support of such strikes are illegal. Sympathetic strikes are declared illegal by defining a trade dispute within an industry in regard to the employment in the industry alone. The privileges of trade union members are protected from invasion on the ground of a refusal to join such illegal strikes.

Sympathetic strikes are by implication illegal under the Act.

As the procedure regarding the appointment of the Court of Enquiry and Boards of Conciliation under the Act was found to be cumbrous and inconclusive in character, the Government of Bombay passed provincial legislation in 1934 to remedy these defects.

The Labour Commission recommended that every Provincial Government should appoint an officer or officers to undertake conciliation. The Commissioner of Labour in Madras, the Director of Industries in Punjab and the Director of Statistics, Deputy Commissioners and the Director of Industries in Central Provinces have been accordingly vested with powers as conciliation officers.

The Bombay Trade Disputes Conciliation Act of 1934 provided for the appointment of the Commissioner of Labour as ex-officio chief conciliator and also for the appointment of a Labour Officer, special conciliators and assistant conciliators. A Labour Officer was also appointed in 1934 to safeguard the interests of the workers. The Millowners' Association too appointed a Labour Officer of its own to represent mill managements in proceedings with the Government Labour Officer and the chief conciliator.

The Bombay Industrial Disputes Act of 1938:—The object of the Bombay Industrial Disputes Act of 1938, supplanting

the earlier Act of 1934, is to ensure that the machinery of conciliation and arbitration as provided for by the Act shall be fully exhausted before a strike or lock-out can be declared.

The Act provides for the registration of unions which have been recognised by the employers concerned. Registration confers various rights on the unions regarding representations in behalf of the workers. Labour Officers and conciliators may be appointed for different areas or industries in the province, and machinery is established to ensure that the grievances of workers or any alteration in their conditions of service are fully investigated. Strikes and lock-outs are therefore rendered illegal until the entire reconcilliation machinery as provided for by the Act has been fully exhausted. The right to declare a strike or lock-out must be exercised within a period of two months following the completion of conciliation proceedings. Conciliation starts immediately if a dispute is likely to occur, because the Act provides that an employer or a workman who desires to make a change in wages or hours or other conditions of employment must give notice of his intention to do so to the prescribed authorities, and no change can be carried out until the machinery of the Act has been fully utilised.

The Act also provides for the setting up of an Industrial Court presided over by a High Court Judge or a lawyer qualified to be a High Court Judge. The Court is to act as a tribunal for voluntary arbitration on matters submitted to it by the parties to a dispute. It will also function as a court of final appeal in numerous cases arising out of the working of the Act. The court is to be the tribunal which will determine whether a strike or lock-out is illegal, and all questions of interpretation of agreements and awards will be submitted before it. The Court has already been established under the Act. The Bombay Industrial Disputes Act of 1938 is an outstanding piece of labour legislation.

The worker's right to a strike was severely restricted by the Defence of India Rule 81A, passed by the Government of India in 1942. The Essential Services (Maintenance) Ordinance of 1941 was aimed at preventing workers in services declared by the Government as 'essential' from leaving their employment.

The Bombay Industrial Relations Act of 1946 is designed to take the place of the Industrial Disputes Act of 1938, by retaining

most of the features of the latter and introducing a few new provisions. The Act endeavours to extend the scope of adjudication by compulsory arbitration. It provides for the setting up of Labour Courts with powers to impose penalties and a higher Industrial Court with appellate jurisdiction.

The Indian Industrial Disputes Act came into force on 1st April, 1947. It provides for an elaborate conciliation machinery. If an industrial dispute occurs or is feared, the conciliation officer is to inquire into it and help the parties to come to an amicable settlement. He is required to submit the report of his inquiry within 14 days to the appropriate Government. If the conciliation officer fails to bring about an amicable settlement the matter is to be taken up by a Conciliation Board with an independent chairman and two to four other members. The Board is expected ordinarily to complete its work within two months. If the Board succeeds in bringing about an agreement, this is to remain in force for six months or a mutually agreed period whichever is longer. Provision has been made for the appointment of a Court of Inquiry to investigate the questions in dispute referred to it. The Court is to consist of one or more independent persons and must submit its report to the appropriate Government within six months. Provision is also made for the setting up of Industrial Tribunals composed of High Court Judges. Their award is to be binding for six months or an agreed period whichever is longer. Strikes or lock-outs are not permissible during the pendency of conciliation proceedings.

The Bill provides for the establishment of Works Committees in industrial establishments, employing one hundred or more workmen. These committees are to consist of representatives of employers and workmen, and the number of workmen's representatives, to be chosen in consultation with registered Trade Unions of workmen, is to be at least equal to that of the employers. The function of the Works Committees is to promote measures for securing and preserving amity and good relations between employers and workmen and enable both to meet each other informally and settle differences as they arise. The Act accepts the principle of compulsory arbitration. Although this provision has been bitterly criticised for depriving workers of their legitimate right to a strike, it is argued that it is desirable that the

Government should have the power of enforcing compulsory arbitration when the interests of the community as a whole demand it. It has been reiterated that as a rule the method of conciliation will in practice be resorted to and the Act in addition provides for voluntary arbitration. The provision for compulsory arbitration is calculated to make the parties to the dispute more amenable to reason and more willing to come to an agreement.

The Government of India have gradually evolved and perfected a new consultative body, *viz.*, the Indian Labour Conference (Tripartite Labour Conference) since 1940. The Government of India, the provinces and States, employers' organisations and workers' organisations are represented in the Plenary Labour Conference, which meets once a year. The Conference has a Standing Committee which meets more frequently. Generally labour legislation is previously discussed by the Plenary Labour Conference and the Standing Committee before being formally laid before the Legislature.

The beneficial results of the above legislation have been fully utilised until lately. The industrial life of India was threatened with labour unrest and in 1948 the number of strikes was so frequent in all sectors of industries that there was a perilous decline in production. The Indian economy which was endangered by inflationary tendencies was rendered extremely vulnerable by industrial disputes, involving enormous working hours lost. The mechanism for the settlement of industrial disputes was fully invoked and it effectively succeeded in eliminating labour unrest to a gratifying extent by the end of 1948.

It is often erroneously contended and misrepresented by vested interests that the worker possesses fundamental rights to a strike in order to better his conditions and the prevailing legislation curbs such rights. The existing laws fully concede such rights, but they aim at eliminating the chances of strikes. The fundamental and underlying principles of such legislation is to explore all amicable means of settling a dispute before a strike is allowed to develop. The state which exists for social welfare has every right to see that the normal economic life of the community is not unnecessarily jeopardised by baneful strikes, if they are preventible by measures of conciliation.

The State and Industrial Relations :—The Government of India faced the highly explosive labour situation in the country with boldness and sympathy. Faced with recurring strikes from 1947, the Government stepped in with determination to end such industrial catastrophes.

The Industries Conference held in December, 1947, adopted a Truce Resolution under which the employers and workers undertook not to indulge in any dispute leading to cessation of work for at least three years and the Government was keen on seeing that the Resolution is effectively implemented in practice. The Conference also passed a resolution, namely, ". . . . The system of remuneration to capital as well as labour must be so devised that while in the interests of the consumers and the primary producers, excessive profits should be prevented by suitable methods of taxation and otherwise, both will share the product of their common effort, after making provision for payment of fair wages to labour, a fair return on capital employed in the industry and reasonable reserves for the maintenance and expansion of the undertaking." The Government is anxious to maintain peace on the industrial front in order to step up production in the country and they accepted the above resolution in Government's Industrial Policy Statement, which was issued early in 1948. The Government stated in that Policy announcement that they consider that labour's share of the profits should be on a sliding scale normally varying with production. They propose, in addition to the overall regulation of industry by the State, to establish machinery for advising on fair wages, fair remuneration for capital, and conditions of labour. They will also take steps to associate labour in all matters concerning industrial production.

The machinery which the Government propose to set up will function at different levels—central, regional and unit. At the centre, there will be a Central Advisory Council, which will cover the entire field of industry, and will have under it committees for each major industry. These committees may be split up into sub-committees, dealing with specific questions relating to the industry, namely, production, industrial relations, wages fixation and distribution of profits. The regional machinery under the Provincial Governments will be provincial advisory boards which, like the central advisory council, will cover the entire field of industry within the province; they will have under them pro-

vincial committees for each major industry. The provincial committees may also be split up into various sub-committees dealing with specific questions relating to production, wages fixation and industrial relations. Below the provincial committees will come the works committees and production committees attached to each major industrial establishment.

The works committes and the production committees will be bi-partite in character, consisting of representatives of employers and workers only in equal numbers. All other committees will be tri-partite with representatives of government, workers and employers.

The Government hope that the machinery proposed will substantially reduce the volume of industrial disputes. In the case of unresolved conflicts, the Government trust that the management and labour will, in their own interests and in the larger interests of the country, agree to settle them through recognised channels of conciliation and arbitration, which will be provided by the Government. The industrial relations machinery, both at the Centre and in the Provinces is being strengthened and permanent industrial tribunals are being established for dealing with major disputes.

The Government of India are also taking special steps to improve industrial housing as quickly as possible. A scheme for ten years is under contemplation, and a housing board is being constituted for this purpose. The cost will be shared in suitable proportions between Government, employers and labour, the share of labour being recovered in the form of reasonable rents.

In order to ensure quick decisions on the various matters arising out of the industrial truce resolution, the Government is appointing a special officer.

It may be observed that the Government has since been actively implementing in practice the above commitments as fast as practicable.

The Central Advisory Council is already functioning and the Fair Wages Committee has been making helpful progress.

In order to associate the workers in profits of business on a profit-sharing basis, the Government has announced that it proposes to introduce on an experimental basis schemes of profit-

sharing in iron and steel, cotton, jute, sugar, paper and cement industries. Although the workers' demand for a profit-sharing scheme has attained almost a fanatical sanctity, such a measure is likely to be fraught with great practical difficulties. It is also doubtful if workers will ultimately benefit from such schemes to a greater measure than what they are receiving at present by way of all emoluments. It is worth serious consideration whether such dubious experiments should be tried at this critical period in the history of Indian industries. It is clear that costs of Indian Industries are very high as compared with other competitive countries and mounting wages costs are the main contributory causes. The future of the Indian industries lies in stepping down their costs of production. The sellers' market has come to an end and danger signals of a recession are already making their appearances on all sectors of economic life. The profit curves of Indian industries are fast declining and a large number of them are struggling hard to break even. It will therefore be extremely hazardous to introduce profit-sharing schemes at this period of dwindling profits and economic difficulties.

Although awards of industrial tribunals have been able to eliminate conflicts to a certain extent, they have largely contributed to a sense of insecurity and uncertainty in business circles. As labour tribunals work under provincial jurisdiction as independent bodies, they have been very often giving differing and conflicting awards and a businessman is in consequence faced with confusion. Lack of co-ordination and uniformity is the outstanding feature of these awards and it is therefore essential that the Central Government should take up this question and bring the operation of all industrial tribunals under its control and supervision. It is gratifying to observe that the Central Government proposes to introduce an Industrial Relations Bill at an early date, which is aimed at bringing within its scope the relationship between labour and management and industrial truce machinery. It proposes to set up labour courts in provinces to make a start in collective bargaining for the workers. The courts would deal with minor disputes between labour and management, while major questions like basic wages, bonus, etc., would be referred to industrial tribunals. The labour machinery would shortly be strengthened by the addition of more officers to ensure effective implementation of industrial truce.

The following statistics of Industrial Disputes in India are given:—

INDUSTRIAL DISPUTES IN INDIA

Year	No. of Disputes	Workers Involved	Man-days Lost
1939	406	409,189	4,992,795
1943	716	525,088	2,342,287
1947	2,251	2,353,117	16,562,666
1948 March	176	148,839	1,366,801
June	142	119,068	683,779
September	87	57,439	165,266
October	108	109,514	412,748
November	111	78,519	293,068
December	114	74,566	398,622
1949 January	122	70,639	524,617

Regional Labour Commissioners have been appointed by the Central Government at Bombay and Calcutta for administering this new machinery which has been set up to deal with industrial relations in industries and undertakings in the "Central Sphere." The organisation is under the charge of Central Government's Chief Labour Commissioner at the headquarters.

Industries within the Central Sphere are all industrial establishments owned or controlled by the India Government, Federal Railways, mines, oil-fields and major ports.

As the Chief Commissioner's organisation will be responsible for conciliation in all matters concerning the "Central Sphere", the existing machinery under the Conciliation Office and the Supervisor of Railway Labour ceases to have separate existence. Officers under the Chief Labour Commissioner are being invested with statutory powers of conciliation under the Trade Disputes Act, 1926, as amended in 1947. They are also being empowered as Supervisors of Railway Labour and Inspectors under the Acts relating to payment of wages and employment of children in Federal Railways and major ports. In addition, industrial relations will now be governed by the Industrial Policy Announcement of the Government, based upon the Industrial Truce Resolution, passed by the Industries Conference in 1947.

The Trade Union Movement in India :—Early in 1918, Mr. B. P. Wadia organised trade unions in Madras and the

movement spread to Bombay. Although organisations of workers were frequently formed from 1917 following labour unrest due to high prices, unsatisfactory working conditions, long hours, etc., they were essentially temporary and vanished normally after obtaining redress of their grievances. It was not until the establishment of an All-India organisation in the form of the All-India Trade Union Congress, which began to hold annual session from 1920 that the trade union movement took deep roots in India. The movement also gathered momentum from the beginning of the International Labour Office, which afforded opportunities to Indian labour to associate with their confreres in other countries through the mechanism of annual International Labour Conferences.

The aggregate number of registered Unions was 700 in 1939 with membership, exceeding half a million. The female members of Unions is comparatively small, consisting of about 4 per cent of the total. The following table illustrates the present position:—

Province	No. of Registered Trade Unions	No. of Unions making returns	Membership of Unions making returns
Ajmer-Merwara	3	3	946
Assam	9	9	2,486
Bengal (E. & W.)	330	134	286,255
Bihar	49	31	73,428
Bombay	93	79	172,679
C. P. & Berar	53	27	13,748
Delhi	40	19	30,504
Madras	154	141	88,270
N.-W. F. P.	4	2	328
Orissa	4	4	1,494
Punjab (E. & W.)	22	21	8,308
Sind	39	39	12,431
U. P.	34	34	36,734
Trade Unions whose objects were not confined to one Province ...	31	30	161,777
TOTAL ...	865	573	889,388

In order to guide the trade union movement along right lines, the Trade Union Act of 1926 was passed and it defined the position of trade unions in precise terms. The registration of trade unions is optional, but the Act confers certain valuable

privileges on the registered bodies which are denied to those that choose to remain unregistered. A registered trade union is required to define its name and the objects for which it is established. It must keep a list of members and provide for a regular annual audit of its funds which must be spent on certain specified objects calculated to promote the obvious interest of the members. Not less than one half of the office-bearers of a registered trade union must be persons employed in the industry concerned. The Act grants immunity from criminal liability to all trade union officials acting in furtherance of all legitimate objects of the union. They are not liable to be indicted for conspiracy. The Act provides that no suit shall be maintainable in any civil court against any officer or member of a registered union regarding any act done by him in contemplation or furtherance of a trade dispute on the ground only that such act induces some other persons to break a contract of employment or is an interference with the trade, business, or employment of some other person or his right to dispose of his capital or labour as he wants. It also provides that no suit shall be maintainable in any civil court against a registered trade union regarding any act done in contemplation or furtherance of a trade dispute by any person acting on behalf of a trade union, provided it is proved that such person acted without the knowledge of or contrary to express instructions given by the executive of the trade union. A registered trade union may create a fund for the promotion of the civil and political interest of its members, the contributions being on a strictly voluntary basis.

Although the trade union movement has made much headway during recent years, it reveals certain inherent weaknesses. The Indian movement lacks in democratic principles, which are essential for the growth of sound trade unions. The development of trade unions in India has been handicapped by the poverty of the workers, who often avoid joining unions, which require the payment of regular membership fees and the observance of a certain code of discipline. The mass illiteracy of labour has frankly left the leadership of the trade union movement into the hands of outsiders, who lack in technical knowledge and mix up politics with economics. More often than not, these leaders sacrifice the real interest of workers for personal ambitions. Lately, communist influences have been permeating several unions

which are being exploited for capturing political powers. It is often found that the formation of trade unions has been impeded by lack of cohesion among workers, due to their failure to understand one another, following different languages, which workers of a same industrial establishment speak. The uniformity of languages accounts for comparatively larger success associated with unions located in Ahmedabad. Generally, the trade union movement has been solidly built up among workers in the employ of the Government, railways and semi-Government undertakings. It may be observed here that the representation of labour given in Legislative Assemblies under the 1935 constitution through the instrument of organised and registered unions assisted to consolidate the trade union movement in this country.

The pressing need for a co-ordination of the activities of the individual unions was recognised at a very early stage of the movement and both central and provincial federations were formed. A central organisation at the apex was also necessary because such a body could make recommendations with regard to the personnel of the labour representation on Indian delegations to the Annual Sessions of the International Labour Conference. The claims of membership made by three All-India labour organizations, the All-India Trade Union Congress, the Indian National Trade Union Congress and the Hind Mazdoor Sabha in their latest reports to the Indian Government are as follows:

AITUC—679,143 members, 734 affiliated unions; INTUC—986,983 members, 707 affiliated unions; and HMS—618,802 members, 380 affiliated unions.

The oldest of the three, the AITUC, which is dominated by the Communists, has the largest membership—205,817 from Bengal with 173 unions. The next important place of its influence is stated to be Madras where it claims to have a membership of 146,665 under 234 unions. Bombay comes third with 128,050 under 78 unions.

The Congress-sponsored INTUC ranks first in membership but second as regards the number of affiliated unions. It came into existence in 1946. Its membership is more or less evenly distributed.

Led by Socialists, the Hind Mazdoor Sabha was started in December, 1948 and is reported to be influential in Bombay, Ahmedabad and Bihar.

The total number of registered unions in the Indian Dominion is 2,278. There are 458 registered unions with an aggregate membership of 50,000 outside the three all-India organizations. They represent small "politically unimportant" group of workers.

The National Institute of Industrial Psychology :—It is a very useful institution in England. It is run mainly by employers of labour. It generally undertakes investigations into working conditions of factories in order to discover improved methods. Investigators lead actually the life of those whose investigations they are concerned with during the period of their investigations. They usually examine (*a*) the quality, productive capacity and efficiency of plant, (*b*) recruitment and training of worker, (*c*) hours of work, and (*d*) elimination of wastage in a factory. It is proposed to start a similar institute in India under government auspices.

Other Measures of Industrial Welfare :—The scope for extending the work of industrial welfare is vast in this country. Welfare work undertaken to improve the health and standard of living of workers is likely not only to step up the level of human society, it will substantially add to the efficiency of the working class. Welfare works may be carried out by employers, employees, state and outside agencies.

The scope for this kind of work may be done inside and outside the factories. In addition to various educational facilities provided for by the state, enlightened employers like Tatas have arranged for the education of the workers by establishing day and night schools. The Social Service League of Bombay and Young Men's Christian Association have also been doing useful work in this direction. It is now almost universal for large industrial establishments to provide medical facilities. The provision of wholesome food and drink is deplorably lacking in India and the problem should be effectively met by organising canteens and tea shops under strict supervision. Although certain mills and factories have arranged for grain shops, the workers are still largely exploited by the banias and efforts should be strenuously made to give relief in this direction by the organisation of co-operative stores. Until lately, little attention was paid to see how the leisure period of a worker is usually spent. The Social Service League, the Seva Sadan Society, the missionary societies, etc.,

have been doing useful work in welfare works. The All-India Industrial Welfare Conference held in Bombay in 1922 discussed the possibilities of co-ordinating the activities of various organisations devoted to welfare work. The Government of India requested all provincial governments in 1926 to collect information of various measures of welfare work found in their respective areas. Several enlightened employers have also organised various measures of welfare and social work for their workers. The Cawnpore Labour Enquiry Committee pleaded for the set-up of a Welfare Council, consisting of representatives of various organisations, engaged in welfare work.

Several provincial governments have also initiated welfare measures. The Government of Bombay opened welfare centres in the industrial areas of the city and Bombay's lead has been followed by Bengal, Sind, Central Provinces, Bihar and United Provinces. The Government of India emphasised the importance of welfare work by appointing in 1942 a Central Adviser on Labour Welfare and Assistant Labour Welfare Advisers in different provinces.

Pakistan :—As industries are few in Pakistan, the labour problem has not assumed any serious magnitude, but the Government of Pakistan proposes to institute Industries Boards to arbitrate in disputes between Labour and Management.

Before partition, there were two important labour organisations in India, namely, the All-India Trade Union Congress and the Indian Federation of Labour. After partition the labour leaders in Pakistan areas decided to work independently of their counterparts in India. The unions in Pakistan, which were previously affiliated to the All-India Trade Union Congress, formed themselves into the Eastern Pakistan Trade Union Federation and Pakistan Trade Union Federation for Eastern and Western Pakistan respectively. The former has 35 unions affiliated to it and claims to have a membership of 48,000. The Unions in Western Pakistan, which were previously affiliated to the Indian Federation of Labour, formed themselves into the Pakistan Federation of Labour. This has 21 unions affiliated to it and claims to have a membership of 31,000. No national organisation which may be regarded as representative of labour in the whole of Pakistan has as yet emerged. Such an organisation is, however, necessary in the interests of the working classes.

CHAPTER XVII

THE STATE IN RELATION TO INDIAN INDUSTRIES

The Problem of Nationalisation:—The demand for the nationalisation of Indian industries gathered momentum with the advent of the Congress in authority. The Economic Programme Committee of the Congress favoured a drastic programme of nationalisation. It recommended the immediate nationalisation of the key and Defence industries and the full nationalisation of other industries in course of five years.

When the Congress assumed powers of the State after India's independence, persons in authority proclaimed themselves in favour of nationalisation and the Government in its new zeal went ahead with several fancied legislative measures, aimed at creating conditions for the nationalisation of industries and putting a brake on private enterprise and initiative. The result of these measures devised in haste proved disastrous in practice and the present economic stagnation of India bears clearly the stamp of hitherto pursued policies. Physical output has been declining far short of expectations. India's production costs have risen and are continuing to rise against a reverse world trend with disastrous consequences for India's foreign trade, which continues to disclose a widening adverse balance of trade. The flow of savings in industry has ceased and reserves of fixed and working capital are running low. Although the official industrial policy is not entirely responsible for this economic landslide, the fancy legislative proposals of the past nineteen months cannot escape the responsibility of creating in the country a lack of confidence, which is an outstanding criterion of the present economic life of the country.

Considered from the standpoint of theory, the nationalisation of industries offers certain indisputable benefits. If the State owns and controls all means of production, the national dividend is likely to be equitably distributed among the members of the society and there remains a more certain possibility of increasing the general standard of living in the country. These assumptions are likely to be true, provided production is maintained at a high level of efficiency. If the nationalisation of industries results in

general economic deterioration, it will make the position worse. It is no use introducing the nationalisation of industries in haste if it means a reduced national dividend, because no enlightened Government aims at distributing poverty among its people. Therefore the entire question of nationalisation should be scrutinised from a practical point of view. We shall have to examine whether the Government possesses the requisite resources in finance, technical personnel, experience etc., to run all industrial enterprises more efficiently than private initiative and judged by this criterion, it is found that the scope of the nationalisation of industries is likely to be limited for several years to come. It is generally found in practice that the few state enterprises which exist in this country are not run well due to lack of suitable personnel. The taking over of several transport services and electricity concerns by provincial governments during recent years shows that efficiency has declined as compared with past private management. It is no use loading the tax-payers with needless losses, following lax, inept or unskilled management.

We are not however pleading for a policy of complete *laissez faire* in economic matters. Nationalisation should remain the ultimate goal of every state, but it should be introduced only piecemeal as circumstances permit. The function of a modern state is to secure the optimum economic welfare of its citizens and as such it should be armed with ample powers of controlling the resources of the community in order to advance the standard of life of its members. The economic function of a state should be guided by the sole test of "greatest good of the greatest number". The consensus of opinion therefore favours the pursuit in India by the Government of a middle course in economic matters. There should remain in India for a sufficiently long time to come wide scope for private initiative and enterprise under checks and balances, exercised by the state and there are groups of industries, which may be usefully state-owned and controlled and the Government should concentrate attention upon attaining a high pitch of efficiency in state industries by harnessing all resources and powers.

Government Statement on Future Industrial Control and Development :—It is gratifying to observe that the Government of India has announced to pursue a middle course in economic matters, which is dictated by practical expediency. In order to

remove all uncertainties and revive a feeling of confidence, the Government of India announced their Industrial Policy on 6th April, 1948.

The following is part of the text of the Government of India's statement on Industrial Policy. The Government statement seeks to define the relative spheres and functions of State and private enterprise, and promises the creation of machinery to determine fair remuneration for both capital and labour. Consultative and planning machinery will function through a network of committees, extending from a Central Advisory Council at the top down, *via* provincial and other authorities, to works and production committees at the bottom.

The Government of India has given careful thought to the economic problems facing the country. The nation has now set itself to establish a social order where justice and equality of opportunity shall be secured to all the people. The immediate objective is to provide educational facilities and health services on a much wider scale, and to promote a rapid rise in the standard of living of the people by exploiting the latest resources of the country, increasing production and offering opportunities to all for employment in the service of the community. For this purpose, careful planning and integrated effort over the whole field of national activity are necessary; and the Government of India proposes to establish a National Planning Commission to formulate programmes of development and to secure their execution. The present statement, however, confines itself to Government's policy in the industrial field.

Any improvement in the economic conditions of the country postulates an increase in national wealth; a mere redistribution of existing wealth would make no essential difference to the people and would merely mean the distribution of poverty. A dynamic national policy must, therefore, be directed to a continuous increase in production by all possible means, side by side with measures to secure its equitable distribution. At this present critical state of the nation's economy, when the mass of the people are below the subsistence level, the emphasis should be on the expansion of production, both agricultural and industrial; and in particular on the production of capital equipment, of goods satisfying the basic needs of the people and of commodities the export of which will increase earnings of foreign exchange.

The problems of State participation in industry and the conditions in which private enterprise should be allowed to operate must be judged in this context. There can be no doubt that the State must play a progressively active role in the development of industries, but ability to achieve the main objectives should determine the immediate extent of State responsibility and the limits to private enterprise. Under present conditions, the mechanism and the resources of the State may not permit it to function forthwith in industry as widely as may be desirable. The Government of India are taking steps to remedy the situation; in particular, they are considering steps to create a body of men trained in business methods and management. They feel, however, that for some time to come, the State could contribute more quickly to the increase of national wealth by expanding its present activities, wherever it is already operating, and by concentrating on acquiring and running existing units. Meanwhile, private enterprise, properly directed and regulated, has a valuable role to play.

On these considerations, the Government have decided that the manufacture of arms and ammunition and the ownership and management of railway transport should continue to be the exclusive monopoly of the Central Government. Further, in any emergency, the Government would always have the power to take over any industry vital for national defence. In the case of the following industries, the State—which, in this context includes Central, Provincial and State Governments and other public authorities like Municipal Corporations—will be exclusively responsible for the establishment of new undertakings, except where, in the national interest, the State itself finds it necessary to secure the co-operation of private enterprise, subject to such control and regulation as the Central Government may prescribe;

(1) Coal (the Indian Coalfields Committee's proposals will be generally followed).

(2) Iron and Steel.

(3) Aircraft manufacture.

(4) Shipbuilding.

(5) Manufacture of telephone, telegraph and wireless apparatus, excluding radio receiving sets.

(6) Mineral oils.

Management of State enterprise will, as a rule, be through the medium of public corporations under the statutory control of the Central Government, who will assume such powers as may be necessary to ensure this. While the inherent right of the State to acquire any existing industrial undertaking will always remain, and will be exercised whenever the public interest requires it, Government have decided to let existing undertakings in these fields develop for a period of ten years, during which they will be allowed all facilities for efficient working and reasonable expansion. At the end of this period, the whole matter will be reviewed and a decision taken in the light of circumstances obtaining at the time. If it is decided that the State should acquire any unit, the fundamental rights guaranteed by the Constitution will be observed and compensation will be awarded on a fair and equitable basis.

The Government of India have recently promulgated a measure for the control by the State of the generation and distribution of electric power. This industry will continue to be regulated in terms of this measure.

The rest of the industrial field will normally be open to private enterprise, individual as well as co-operative. The State will also progressively participate in this field; nor will it hesitate to intervene whenever the progress of an industry under private enterprise is unsatisfactory. The Central Government have already embarked on enterprises like large river valley developments, which are multi-purpose projects of great magnitude, involving extensive generation of hydro-electric power, and irrigation on a vast scale, and are calculated in a comparatively short time to change the entire face of large areas in this country. Projects like the Damodar Valley Scheme, the Kosi Reservoir, the Hirakud Dam, etc., are in a class by themselves and can stand in comparison with any of the major schemes in America or elsewhere. The Central Government have also undertaken the production of fertilizer on a very large scale, and have in view other enterprises like the manufacture of essential drugs and of synthetic oil from coal; many Provincial and State Governments are also proceeding on similar lines.

There are certain basic industries of importance, apart from those mentioned in paragraph 4, the planning and regulation of

which by the Central Government is necessary in the national interest. The following industries whose location must be governed by economic factors of all-India import, or which require considerable investment or a high degree of technical skill, will be the subject of Central regulation and control:—

(1) Salt.
(2) Automobiles and tractors.
(3) Prime Movers.
(4) Electric Engineering.
(5) Other heavy machinery.
(6) Machine tools.
(7) Heavy chemicals, fertilizers and pharmaceuticals and drugs.
(8) Electro-Chemical industries.
(9) Nonferrous metals.
(10) Rubber manufactures.
(11) Power and industrial alcohol.
(12) Cotton and woollen textiles.
(13) Cement.
(14) Sugar.
(15) Paper and newsprint.
(16) Air and Sea Transport.

The above list cannot obviously be of an exhaustive nature. The Government of India while retaining the ultimate direction over this field of industry, will consult the Governments of the Provinces and States at all stages and fully associate with them in the formulation and execution of plans. Besides these Governments, representatives of Industry and Labour will also be associated with the Central Government in the Industrial Advisory Council and other bodies which they propose to establish, as recommended by the Industries Conference.

Cottage and small-scale industries have a very important role in the national economy, offering as they do scope for individual, village or co-operative enterprise, and means for the rehabilitation of displaced persons. These industries are particularly suited for the better utilisation of local resources and for the achievement of local self-sufficiency in respect of certain types of essential consumer goods like food, cloth and agricultural implements. The healthy expansion of cottage and small-scale industries

depends upon a number of factors like the provision of raw materials, cheap power, technical advice, organised marketing of their produce, and, where necessary, safeguards against intensive competition by large-scale manufacture, as well as on the education of the worker in the use of the best available technique. Most of these fall in the Provincial sphere and are receiving the attention of the Governments of the Provinces and the States. The resolution of the Industries Conference has requested the Central Government to investigate how far and in what manner these industries can be co-ordinated and integrated with large-scale industries. The Government of India accept this recommendation. It will be examined, for example, how the textile mill industry can be made complementary to, rather than competitive with, the handloom industry, which is the country's largest and best organised cottage industry. In certain other lines of production, like agricultural implements, textile accessories and parts of machine tools, it should be possible to produce components on a cottage industry scale and assemble these into their final product at a factory. It will also be investigated how far industries at present highly centralised could be decentralised with advantage.

The Resolution of the Industries Conference has recommended that Government should establish a Cottage Industries Board for the fostering of small-scale industries. The Government of India accept this recommendation and propose to create suitable machinery to implement it. A cottage and small-scale industries directorate will also be set up within the Directorate-General of Industries and Supplies.

One of the main objectives will be to give a distinctly co-operative bias to this field of industry. During and before the last war, even a predominantly agricultural country like China showed what could be done in this respect, and her mobile industrial co-operative units were of outstanding assistance in her struggle against Japan. The present international situation is likely to lessen to a marked degree our chances of getting capital goods for large-scale industry, and the leeway must be made up by having recourse to small-size industrial co-operatives throughout the country.

The Government, however, recognise that their objective, *viz.*, securing the maximum increase in production, will not be realised merely by prescribing the respective spheres of the State and of

private enterprise in industry; it is equally essential to ensure the fullest co-operation between labour and management and the maintenance of stable and friendly relations between them.

The Government of India agree with the view of the Industries Conference that, while it should be recognised that participation of foreign capital and enterprise, particularly as regards industrial technique and knowledge, will be of value to the rapid industrialisation of the country, it is necessary that the conditions under which they may participate in Indian industry should be carefully regulated in the national interests. Suitable legislation will be introduced for this purpose. Such legislation will provide for the scrutiny and approval by the Central Government of every individual case of participation of foreign capital and management in industry. It will provide that, as a rule the major interest in ownership and effective control should always be in Indian hands, but power will be taken to deal with exceptional cases in the manner calculated to serve the national interest. In all cases, however, the training of suitable Indian personnel for the purpose of eventually replacing foreign experts will be insisted upon.

The Government of India are fully alive to their direct responsibility for the development of those industries which they have found necessary to reserve exclusively for state enterprise. They are equally ready to extend their assistance to private or co-operative enterprise in the rest of the industrial field, and in particular by removing transport difficulties and by facilitating the import of essential raw materials to the maximum possible extent. The tariff policy of the Government will be designed to prevent unfair foreign competition and to promote the utilisation of India's resources without imposing unjustifiable burdens on the consumer. The system of taxation will be reviewed and readjusted where necessary to encourage saving and productive investment and to prevent the undue concentration of wealth in a small section of the population.

It may be mentioned here that the Industrial Policy of the Government is essentially based upon the recommendations of the Economic Programme Committee of the Congress, which rather favoured drastic measures of nationalisation. The latter recommended immediate nationalisation of key and defence industries and other industries in course of the next five years. The Government have discreetly chosen a middle course.

Industries (Development and Control) Bill of 1949 :— The Industrial Policy Resolution obtained a favourable reception in the country, but the re-vitalising effect has unfortunately been counteracted by the introduction of the Industries (Development and Control) Bill of 1949, which appears to vest an uninformed bureaucracy with wide powers, but it can be assumed that such powers are likely to be exercised with due caution and restraint, because it is always the avowed intention of the Government to give the private sector of industry a free hand except in those industries which it is intended to promote under state ownership and direction.

In the statement of objects and reasons appended to the Bill it is said that the latter brings under Central control the development and regulation of a number of important industries, the activities of which affect the country as a whole and the development of which must be governed by economic factors of all-India import. It is asserted that the planning of future development on sound and balanced lines is sought to be secured by the licensing of all new undertakings by the Central Government. The Bill accordingly confers on Government power to make rules for the registration of existing undertakings, for regulating the production and development of the industries in the Schedule and for consultation with Provincial Governments on these matters. Provision has also been made for the constitution of a Central Advisory Council, prior consultation with which will be obligatory before the Central Government takes certain measures such as the revocation of a licence or taking over the control and management of any industrial concern.

The crux of the new legislation is that the Central Government may, subject to the condition of previous publication, make rules for the control and regulation of all or any of the industries named in the Schedule. The 25 groups of industries so enumerated are:

Aircraft, arms and ammunition, automobiles including tractors, cement, coal including coke and other derivatives, electric lamps and fans, electric motors, heavy chemicals including fertilisers, heavy machinery used in industry including ball and roller bearings and gear wheels and parts thereof, boilers and steam generating equipment, iron and steel locomotives and rolling stock,

machine tools, machinery and equipment for the generation, transmission and distribution of electric energy, motor and aviation fuel, kerosene, crude oils and synthetic oils, non-ferrous metals including alloys, paper and newsprint, pharmaceuticals and drugs, power and industrial alcohol, rubber goods, salt, ships and other vessels propelled by steam or by electricity or mechanical power, sugar, tea, telephones, telegraph apparatus and wireless communication apparatus, textiles made of cotton, jute or wool.

Existing and new industrial undertakings are to be licensed, the former within three months of the passing of the present legislation and the latter subject to the observance of such conditions concerning location, size, equipment, technique, as may be laid down in the rules to be framed. The Central Government will have power to revoke, amend, or vary any licence that may be issued. Rule-making will extend to regulation of the production and development of the scheduled industries and will provide for consultation with Provincial administrations regarding these matters. The Government of India will be empowered to require any industry to stimulate its development and to regulate its production and the use of raw materials and fix standards of production. It may prevent an industry from resorting to any act or practice which might reduce its production, capacity or economic value. The Central Government may also require any industry in the schedule to provide facilities for the training of technicians and labour, furnish information or statistics and submit special or periodical returns and reports to Government.

The detailed provisions of the Bill make it clear that if the Central Government so wish they can intervene at almost every stage in the routine management of an industry or its individual units, and if it is the intention to remit even part of such authority to Provincial Administrations the Bill will rightly evoke widespread criticism. What the Bill virtually does is to proclaim the 25 controlled industries "to be State monopolies which are, however, to be run for the time being by those who are at present in charge of them." Penalties are provided and the rights of inspection which the Bill confers are sweeping in character. Clause 15 provides that for the purpose of ascertaining the position or working of any industrial undertaking, or for any other purpose mentioned in the Act, any officer authorised by the Central Government shall have the right to enter and inspect any premises,

or demand the production of any document, book or record and examine any person having control of or employed in any undertaking which may be engaged in an industry enumerated in the schedule. All powers exercisable under the Bill may by order of the Central Government be exercised in its behalf by officers of Provincial Governments or acceding States.

There are several other provisions which are unnecessary and unlikely to be enforced, because the Government does not possess the requisite staff. This piece of legislation is largely negative and prohibitory in character and merely adds to the burdens and controls under which Indian industries are at present working. It is not going to stimulate production. The Government therefore acted wisely in referring it to a Select Committee, which should effect necessary alterations in the Bill.

State Industries :—Railways, Posts and Telephones are State-owned and State-managed industries in India. The Government has recently started a fertiliser factory at Sindri and the Reserve Bank of India was nationalised from 1st January, 1949. The Government proposes to initiate an ambitious scheme of industrialisation by starting State industries and also industries in co-operation with private enterprise.

Work on the Rs. 14-crore Chittaranjan Project for the manufacture of locomotives is proceeding. National interests demand that the country must be self-contained in the matter of key industries. In this context, the Chittaranjan Project is vital in any national emergency. Chittaranjan, the new name for Mihijam, is on the East Indian Railway between Asansol and Madhupur, about 17 miles from Asansol by rail and 20 miles by road and is in the Burdwan district of West Bengal. It is ideally situated, adjoining as it does the labour surplus districts of Santhal Parganas and Manbhum in Bihar and in close proximity to the coal-belt and the steel producing centres. The Chittaranjan workshops are designed to build about 120 steam locomotives and 50 spare boilers per year working single shift and, together with the Tata's Locomotive Factory, are expected to make India self-sufficient in regard to locomotives. About 1,200 machines will be used for manufacturing and assembling spare parts and locomotives, for this work involves a variety of operations embracing various trades, such as pattern making, foundry work, forging and smithy work, dye

sinking, drop stamping, heat treatment of materials, welding, machining of parts to high precision, boiler making, plate work, copper and tinsmith work, fitting work calling for great skill and accuracy, tool making, etc. The workshops involve a heavy construction programme including about 14,000 tons of steel fabrication. The project is expected to employ about 10,000 workers on a single shift work. To begin with, the workshops will produce parts of standard locomotives. The first locomotive is expected to be turned out of the shops complete by the end of 1951.

The Government of India's scheme for setting up new steel plants in India has been unanimously approved by the three American and British firms appointed by the Government. The three firms, Messrs. Koppers Co. and Arthur Mckee & Co. of the U.S.A., and the International Construction Co. of the U.K., were appointed as consultants to make a preliminary technical survey and report on two alternate schemes for the establishment of steel plant in India. All the three consultants have pointed out that even after expanding the existing plant, there will still be an annual deficit of over 1 million tons between demand and supply. The adoption of a two-plant scheme is favoured in preference to a one-plant scheme. For one plant of 500,000 to 600,000 tons capacity, the estimated capital costs will be between Rs. 50 and 60 crores. All the three consultants have selected sites in Orissa and Central Provinces for the two-plant scheme.

A State-owned machine tool industry is to be started immediately in India with the assistance and co-operation of a leading foreign manufacturer of international fame. The industry, when completed, is expected to have an annual outturn of about Rs. 8 crores worth of production and precision-type machine tools. An area of five square miles will be required for the project and a total power supply of 6,000 kw. It will provide employment for about 20,000 workers. The industry is to be developed in five stages and will have a separate factory for each stage. The first stage is expected to be completed in two years and the remaining factories at short intervals thereafter. Representatives of the foreign firm are shortly expected in India. Provincial Governments have been asked to send their recommendations about the site of the factories bearing in mind climate and other factors, which affect the economic production of machine tools before the arrival of the representatives.

Penicillin as a specific for malaria, and sulpha drugs, will be manufactured in a factory proposed to be set up by the Government of India. The factory will have an annual productive capacity of 1,200 billion units of penicillin, 100,000 lbs. of "an anti-malarial drug", 60,000 lbs. of sulphamerazine, 20,000 lbs. of sulphathiazole and 20,000 lbs. of sulphanilamide. Expected to be located near Bombay, the factory will cost Rs. 2 crores. The production is likely to start in less than three years, resulting in an annual saving in imports from hard currency and other areas of Rs. 2·25 crores.

On the recommendation of the Council of Industrial and Scientific Research, the Government of India are now conducting negotiations with expert firms abroad for the production of optical glass which plays an important part in peace as well as in war. The Council has now suggested that investigational and pilot plant work should be taken up without delay at the Central Glass and Ceramic Research Institute at Calcutta. It has also been recommended that a team of ceramic and glass experts should visit the various centres of glass and ceramic industry in the country and make a survey of their difficulties and problems and report to the Government as to which steps should be taken to improve the condition of the industry and that help should be given for its scientific development. It has also been proposed to set up under the auspices of the Council an ionospheric field station outside the city of Calcutta at a cost of over Rs. 80,000. In this station will be carried out research work on ionospheric conditions, knowledge of which is essential for efficient broadcasting and aerial communication. The field station will work under the supervision of the Radio Research Committee of the Council and the ionospheric data collected will form a part of world-wide collection of such data. The governing body has also approved of the proposal to constitute a malaria chemotherapy committee which would co-ordinate and direct research and other investigations on malaria prevention and cure, now being carried out by various Government organizations, universities and research institutes in the country.

The Government of India have decided to undertake the manufacture of hydroelectric and thermal plant in the country and the implementation of this decision may be expected within the current year. Most of the electric plant and equipment requirements of India are supplied from foreign countries. In view of

the immense scope for electric development in India, it is most necessary that these plants and equipments should be manufactured within the country. This would not only lead to overall economy but would be a most valuable insurance in the event of a national emergency.

It may also be observed that the Defence Ministry has been taking active steps to secure the aid of foreign firms to develop the manufacture of heavy armaments in India.

Pakistan : Industrial Policy Statement of the Government of Pakistan :—The Government of Pakistan announced its Industrial Policy in April, 1948, which gives industrialists a firm basis for their development schemes. The primary objectives of the policy are to manufacture in Pakistan the products of Pakistan's own raw materials, especially jute, cotton and hides and skins, and to develop consumer goods industries to meet the requirements of the home market.

Industries in the first category are those which are already State-owned, *i.e.*, posts and telegraphs and the telephone system, wireless and broadcasting and the railways. The second category would comprise industries which are in process of nationalisation, though the only one in this condition is road transport, which is being nationalised by the Provincial Governments. Air transport falls in the third category. Although no official announcement has yet been made there seems little doubt that the Pakistan Government have reconsidered their policy to air transport, and that a substantial measure of nationalisation is to be expected. It is no secret that the two scheduled air transport companies have found the maintenance of regular services a difficult financial proposition, and would welcome some relief. The probability is that a single Corporation would be set up on the lines of Pakistan Aviation Ltd. (the Company which will be responsible for repair and overhaul work at Karachi), with the Government holding 51 per cent. of the shares, the rest being subscribed equally by the two existing air transport companies. In the fourth category we may place the industries about which the Pakistan Government has not yet made up its mind. These are the river services which are to be left to private enterprise for the present, and the petroleum and petroleum products industry which is still under consideration. Finally, we have the industries which are to be owned and operated by the

State. These are: (1) arms and munitions of war; (2) generation of hydro-electric power; (3) manufacture of railway wagons, telephones, telegraph and wireless apparatus. Although the Government reserves a general right to take over or participate in any other industry vital to the security or economic well-being of the State there is no suggestion that these decisions are liable to reconsideration after any given term of years, and they have the merit of being fairly definite and decisive.

It has also been stated that foreign capital will be welcome in Pakistan, provided that it does not claim special privileges, and provided that participation of Pakistan nationals, on both administrative and technical sides, is ensured and training facilities provided. It is understood that no attempt will be made to lay down a formula for this purpose, and the matter will be left to the good sense of the management of an industry, but it is desired that subsidiary companies should be registered in Pakistan. There appears to be no intention of enforcing this by legislative action, but foreign firms would do well to understand that they will not be welcome, and may not be granted all desirable facilities, unless they comply with this directive. If the establishment of the subsidiary company does not involve an issue of capital within the purview of the capital issues control (*i.e.*, exceeding Rs. 1 lakh) there will be no scrutiny of the ownership and the parent company will not be under any obligation to offer a percentage of shares to Pakistan nationals. For industrial ventures a list of 13 industries is given in which Pakistan nationals are ordinarily to be given the option to subscribe at least 51 per cent. of all classes of share capital and debentures. Among the industries are included cement, coal, cotton, spinning and weaving mills, and heavy chemicals but not the jute industry. In industries not specified in this list 30 per cent. of the capital is ordinarily to be offered to Pakistan nationals. Although the original statement contains no mention of the managing agency system, in the supplementary statement subsequently issued, the managing agency system is given the general blessing of the Government, subject to the proviso that managing agencies must work with the primary objective of creating Pakistani administrative and executive control of the industry within the next ten years. It is this proviso which has puzzled business circles. Presumably it applies only to those industries in respect of which the share of indigenous capital was fixed at

51 per cent., but even so a new and far-reaching principle seems to have been slipped in, unless the meaning of the words has been generally misunderstood. It is one thing to lay down, as the original statement did, that nationals of Pakistan should be given the option to subscribe 51 to 30 per cent., as the case may be, of the share capital of new industrial concerns, but quite another to prescribe that the promoters should aim at handing over effective control to Pakistanis within ten years. It hardly seems possible that the Government which is certainly conscious of the inadequacy of indigenous capital and enterprise for industrial development, should have expected foreign capital to risk its resources for the reward of early self-immolation.

It may however be observed that subsequently the Government announced that if Pakistani nationals fail to take up their quota of shares, the promoters of companies will be free to allot the shares according to their option. The Karachi Chamber of Commerce has therefore rightly asked the Government to clarify fully the position in regard to the managing agency system and distribution of shares. The Government has also been asked for an assurance that the rules relating to the share of Pakistani capital will be applied only at the initial stage, when the capital issue is first made, and that there will neither be any subsequent Government intervention to bring the proportion of Pakistani shares up to the original desideratum nor any obligation on the managing agents to attempt continuous readjustment of holdings so as to prevent it falling below the prescribed percentage.

Although there is no doubt that the 51 per cent. rule will have a discouraging effect upon some foreign interests there is no reason to suppose that it involves any serious danger that control of the companies concerned will pass out of the hands of the foreign promoters. If the latter retain 49 per cent of the shares, their voting strength should be strong enough to resist any attempt to take the control out of their hands. The Government do not appear to have any legislation in view, and are not taking any steps to deprive foreign capital of effective control. A provision in the statement which may cause rather more concern to foreign industrialists relates to the remittance of profits. Facilities are to be allowed for remittance only of "a reasonable proportion" of profits to the countries from which the capital is drawn, but clearly before a capitalist abroad invests his capital in a foreign country

he will want to be sure that he is permitted to take his own share of the dividend out of the country. It is understood, however, that remittances of profits to the sterling area countries are likely to be allowed freely and this provision has been inserted in the statement more from the point of view of exchange control than from any other motive.

The Government of Pakistan has also announced that it may find it necessary in national interests, in the event of private capital not forthcoming in adequate measure for the development of any particular industry of national importance, to set up a limited number of standard units more as means of attracting private enterprise than for any other object.

The Government of Pakistan have decided to sponsor the setting up in East Bengal of three jute mills of 1,000 looms each at a cost of about Rs. 7 crores. Specifications are being drawn up and orders will be placed for plant and machinery in Britain, the U.S.A., Canada and other European countries. The project is expected to take about three years to complete. When in operation the factories, it is understood, will give priority to the production of good quality hessian.

It may be obsered that the Government of Pakistan earmarked a sum of Rs. 4 crores in the Capital side of its Budget of 1949-50 for the purpose of setting up a Statutory Corporation in order to select industrial projects for state grants.

The Industrial Survey Committee of the Government of Eastern Pakistan has been doing useful work in exploring the possibilities of establishing suitable industries in their area and determining the size and location of the same.

Planning Advisory Board :—In order to co-ordinate development in Pakistan and ensure uniform progress on all sectors, the Government of Pakistan, in January 1948, set up an Economic Committee of the Cabinet, a Planning Advisory Board and a Development Board.

The Prime Minister presides over the Economic Committee, which consists of the Minister for Commerce, Industries and Works, the Minister for Finance, the Minister for Communications and the Minister for Food, Agriculture and Health. The Committee takes policy decisions on issues submitted to it by the Development Board and the Planning Advisory Board.

The Prime Minister is also Chairman of the Planning Advisory Board which advises the Government generally on matters relating to planning and development, reviews the progress made in implementing plans, and educates the public on the necessity for various development schemes undertaken, in order to get their enthusiastic co-operation.

Development Board :—The Minister of Finance and Economic Affairs is the Chairman of the Development Board and the Secretary-General is the Vice-Chairman.

The Development Board co-ordinates the Central and Provincial development plans so that all available resources are put to the best possible use. It also makes recommendations regarding priorities among the development plans.

The Development Board acts as a clearing house of ideas and information, bringing to the notice of Ministries ideas on schemes which may aid development. It watches the progress of development schemes in order to remove bottlenecks and makes periodical reports to the Cabinet of the progress of schemes.

The Board has approved 52 schemes, involving expenditure of Rs. 13,00,00,000 in 1948-49 and approximately Rs. 18,00,00,000 in 1949-50. The total cost of the schemes spread over a period of five years will be in the neighbourhood of Rs. 45,00,00,000. Of this amount a sum of Rs. 23,00,00,000 will be spent on schemes for the development of electricity, both Hydro-electric and Thermal, and Irrigation; Rs. 11,00,00,000 on development of communications; Rs. 2,00,00,000 on schemes sponsored by the Ministry of Health and Rs. 50,00,000 on development of Broadcasting.

The Development Board, after careful consideration of the Provincial schemes, the financial position of the Central Government, the supply position of the capital goods required for the implementation of these schemes, the availability of technical personnel and other relevant factors, decided to recommend an allocation of Rs. 12·02 crores in 1948-49 as under:

East Bengal ...	... Rs. 4 crores
West Punjab ...	... Rs. 5 crores
N. W. F. P. ...	... Rs. 0·52 crores
Sind ...	... Rs. 2·50 crores

These loans have been offered to the Provincial Governments in order to enable them to undertake and execute their development schemes, which cover a wide range of activities, *e.g.*, the development of hydro-electricity, reclamation of land, extension of canals, roads, etc. It is now for the Provincial Governments to draw and spend these amounts on economically productive and vitally important schemes of development.

Sind has selected for execution about 29 schemes from the old five-year plan drawn up under the undivided Government of India. The total five-year cost of these comes to about 2·90 crores. Of this, about Rs. 45 lakhs will be financially productive. Presuming that 10 per cent. of the total expenditure has already been met this sum would come to about Rs. 29 lakhs. Of the 29 schemes, about seven are research development and training schemes.

There are seven fisheries schemes and these envisage the setting up of a marine and fresh-water Fisheries Research Institute, construction of a fish-curing yard, development of edible oysters, prawn fisheries and deep-set fishing, and provision of transport facilities.

Other schemes include crop manuring, seed distribution and seed multiplication, running of tractors, riverine and land survey, tree plantation, expansion of technical staff, etc.

The N. W. F. P. has about 26 agricultural development schemes. Work on most of them has started and out of a total five-year expenditure of about Rs. 37 lakhs, Rs. 7 lakhs has already been met. Of the 26 schemes, 10 are forestry schemes, concerning conservation of forests, adoption of anti-erosion measures, and training of forest officers and forest rangers. There are six animal husbandry schemes and these envisage the establishment of poultry and sheep-breeding farms, improvement of agriculture, expansion of veterinary research work, etc. There are seven other schemes, and these include development of agricultural engineering, establishment of crop and fruit nursery farms, establishment of seed farms, control of fruit-fly, and expansion of staff.

Of the several agricultural development schemes drawn up by undivided Bengal, whose area of application falls in East Bengal, the East Bengal Government has selected about 18 schemes for execution under present conditions. These cover the following subjects: Establishment of jute seed and other seed multiplica-

tion farms, sugarcane research, organisation of a horticultural section, improvement of livestock, conservation of forests and afforestation of waste lands, establishment of poultry, vaccine institute, mass inoculation, expansion of veterinary staff, establishment of a fish technological station and execution of other fisheries schemes.

Most of the above schemes were started in 1947 and were expected to be completed by 1952. The total five-year expenditure comes to over Rs. 1·60 crores, out of which about Rs. 15 lakhs (roughly 10 per cent. of the total) had already been spent.

West Punjab is still revising the blue prints, and details of expenditure. etc. have not yet been worked out. However an analytical study of the five-year undivided Punjab plan reveals that, in all, 43 agricultural development schemes have their area of application in West Punjab. The total five-year cost (1947-52) comes to about Rs. 2·15 crores. Almost all of the total expenditure will be unproductive financially as 30 out of the 43 schemes are research, teaching, and training schemes.

The Government of the North-West Frontier Province maintains several research stations for the improvement of fruit culture, study and control of plant diseases, analytical work on soils, and introduction and hybridisation of new crops. Large nurseries of fruit plants are maintained to distribute improved plants and a vigorous propaganda machinery deals with the dissemination of agricultural knowledge among the cultivators.

The largest of these is the agricultural research station at Tarnab, 10 miles from Peshawar. It is a model agricultural and fruit farm with extensive fields and orchards, and a modern laboratory.

Agricultural College and Institute, Lyallpur:—The Agricultural College, Lyallpur, is the pioneer institution for giving post-graduate training in horticulture.

The Fruit and Vegetable Section of the Agricultural College and Research Institute of Lyallpur is doing useful work. It conducts research on fruit culture, research on fruit and vegetable preservation and cold storage, teaching, nursery production, district and advisory work, and the functioning of the Co-operative Fruit Development Board.

There are elaborately equipped laboratories and a pilot manufacturing plant for conducting research on the preparation of jam,

jellies, marmalades, fruit squashes, juices, and dehydrated products on a semi-commercial scale.

In addition, there are in all 26 agricultural development schemes (excluding those of Baluchistan) which are to be completely financed by the Centre. These schemes cover the following subjects:

(1) Agricultural research and development;
(2) Plant protection;
(3) Co-operation and marketing;
(4) Fisheries;
(5) Forests;
(6) Animal Husbandry.

Most of the schemes are expected to be completed during the five-year period 1948-53. The total cost of the 26 schemes on completion is estimated to be approximately Rs. 2·71 crores, whereas the immediate two-year cost is expected to be about Rs. 1·56 crores. Out of this over Rs. 22 lakhs is to be spent on research and training schemes. These include schemes for the establishment of the Institute of Developmental Research on herbs, drugs, etc., Central Institute of Agricultural Research, Agricultural Engineering and Traction, Technological Institute, Soil Conservation Research Institute, Forest Research Institute, Forest Products Laboratory, Animal Husbandry Research Institute, Fisheries Department and Laboratory, and sending scholars abroad for training in fisheries. Almost all of these are expected to be completed in the immediate two-year period. The schemes further include horticultural development, setting up of a fish market at West Wharf (Karachi) and running of fishing trawlers, a qualitative cattle census, breeding of cattle and poultry, establishment of woolwashing, shearing and grading centres, eradication of rinderpest, etc.

Besides the above schemes the Centre will also be responsible for the financing of Baluchistan's agricultural development schemes. The Baluchistan agricultural development plan covers about seven schemes.

CHAPTER XVIII

THE NATIONAL DIVIDEND OF INDIA

The national dividend of a country means its aggregate annual income. As this is the total fund, from which incomes of all in a country are derived, the assessment of the national dividend of India is important to determine the standard of living of our people. Various estimates of our National Dividend were made from time to time and none of them can claim to be accurate owing to paucity of data and statistical information.

Dadabhai Naoroji estimated per capita income in British India during 1867-70 at Rs. 20 per annum. He included the value of agricultural produce after deducting 6 per cent. for seed, the value of salt, opium, coal, manufactured goods, fish, milk, etc. He also deducted all profits on commerce and a definite sum on miscellaneous accounts. The valuation of the different items was made by guess-work and the representative method, that is, one or two kinds of major produce, was taken to represent all products. He did not employ any accurate statistical method. He excluded the value of services, which he thought were paid out of the materials produced. As Rs. 34 was the subsistence level, he concluded that India lived on her capital.

Lord Crommer and Sir David Barbour estimated the average per capita income at Rs. 27 in 1882. Digby regarded land revenue as representing varying percentages of the total income. Both Barbour and Digby included agricultural and non-agricultural incomes. Digby calculated per capita income at Rs. 18-8-11 in 1901, while it was Rs. 12-6 in 1899-1900.

Lord Curzon on the basis of facts collected for the Famine Commission of 1898 estimated that the per capita income rose from Rs. 27 in 1880 to Rs. 30 in 1900 by assuming that both agricultural and non-agricultural incomes increased equally.

Wadia and Joshi calculated the national income of India and placed per capita income at Rs. 44-4-6 during 1913-14. They in-

cluded the values of agricultural products after deducting 20 per cent on account of seed, manures, implements, etc. and mineral outputs after deducting 20 per cent for depreciation, and hides, skins, wool, silk, fisheries, livestock, etc. They also deducted from the gross total, home charges, interest payments and profits on foreign capital and remittances abroad on private account.

Shah and Khambatta estimated the per capita income at Rs. 67 in 1921 on the same basis, followed by Wadia and Joshi, except that they allowed for changes in prices during the pre-war and post-war periods.

Findlay Shirras argued that non-agricultural incomes rose faster than agricultural ones and assigned 40 per cent to non-agricultural incomes, compared with 10 per cent by Shah and Khambatta and 30 per cent by Wadia and Joshi. He included the value of services in his estimate and did not deduct anything for seeds, etc. in calculating agricultural incomes. He found per capita income at Rs. 107 in 1921 and Rs. 116 in 1922.

Sir Visvesvaraya calculated per capita income at Rs. 82 in a normal year and Rs. 55 during a bad year.

Dr. V. K. R. V. Rao calculated the per capita income in British India at Rs. 114 in 1942-43 and Rs. 65 in 1931-32. The increase was due to rises of 11 pér cent in agricultural production, 90 per cent in manufactured products, 50 per cent in unorganised industries and 20 per cent in miscellaneous items including services. Since prices rose by over 100 per cent, there was really no increase in net national income.

It may be mentioned here that the Bombay Plan for economic development of India aimed at doubling the per capita income in India within a period of fifteen years, by raising industrial income by 100 per cent, agricultural income 130 per cent and service income 200 per cent. It also proposed to obtain a more equitable distribution of the national dividend to increase general consuming powers of the masses for the purpose of sustaining a high level of production and employment within the country.

The Eastern Economist, a reputed India's weekly, produced the following interesting tables.

NATIONAL INCOME OF 'BRITISH INDIA' 1939-40 TO 1947-48

TABLE I

India's Money Income

(In millions of rupees)

	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	1946-47	1947-48
									(India only)
Income from Agriculture and allied occupations	9,527	10,395	11,048	17,402	21,281	22,938	22,245	25,692	21,293
Income from industry	3,790	4,062	6,020	9,560	12,400	11,120	10,338	9,382	9,800
Other items	6,026	6,126	6,292	6,772	8,651	8,651	9,799	9,798	8,328
Total Income	19,343	20,583	23,360	33,734	42,332	42,709	42,382	44,872	39,421

Per Capita Income of Provinces—India and Pakistan

TABLE II

	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	1946-47	1947-48 (India only)
Total income (rupees millions) ...	19,343	20,583	23,360	33,734	42,332	42,709	42,382	44,872	39,421
Population (in millions)	290	294	298	302	305	306.5	310	314	246
Per capita income (in rupees) ...	67	70	78	112	139	139	137	143	160
Cost of living index (Bombay) (Base 1939-40=100)	100	105	117	160	217	216	219	242	258
Income adjusted with cost of living (Bombay index) (in rupees) ...	67	67	66	70	64	64	63	59	62

Food and Clothing—Consumption Per Head

TABLE III

	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	1946-47	1947-48
Food consumption per head (in lbs.)	388	366	348	378	379	370	340	358	357
Cloth consumption per head (in yds.)	16	16	14	10	14	14	12	12	11

Although various estimates of India's per capita income have been made, they vary widely due to differing methods of calculation, tempered by bias and prejudices, lack of reliable data and paucity of statistical information. In spite of differing calculations, all estimates point out unmistakably the appalling poverty of India. It is true that there are a few who are rich, and in order, therefore to level up prosperity in India, strenuous efforts should be made to increase overall production in the country.

As the question of the national dividend is of supreme importance in determining the standard of living, the incidence of taxation and other economic matters, the Government of India has appointed a National Income Committee, which has been entrusted with the important task of estimating our National Dividend. The Government also proposes to appoint a Planning Commission at an early date to co-ordinate the economic planning of India on sound lines.

The Bowley-Robertson Report Enquiry :—Dr. Bowley and Mr. Robertson were invited by the Government for recommending a scheme for re-organising the Statistical equipment of India. They suggested the establishment of a permanent economic staff consisting of 4 members for the organisation of the work of economic intelligence. This staff is to be attached to the economic committee of the Governor-General's Executive Council. The senior member is to act as secretary to the economic committee and he would prepare reports on important matters, organise the supply of current economic information and plan ahead fundamental economic enquiries. Two of the members should be trained economists, while a third should be the Director of Statistics. Each member should be free to conduct his work. The entire staff should maintain a very close contact with high government officials.

The functions of the Director of Statistics should be to conduct the population census every 10 years and the census of production every 5 years. He should co-ordinate central and provincial statistics. He ought to be helped by the statistical branch of the existing Department of Commercial Intelligence and Statistics, which should be transferred to his control. The function of the Director will be to establish uniformity of classification of statistics in all Government Departments, and to

furnish statistical information for general purposes. He will also be responsible for the publication of the statistical abstract. The Director should also supervise the work of the collection of statistics in the different provinces. Finally, they also recommended the appointment of a whole-time statistician in each of the major provinces in India. It was argued that the existing materials for measuring the national income are inadequate. They therefore suggested the following items for inclusion or exclusion in any measurement of the national incorme by the census of production method. The value of the net output of agriculture, mining, industry, etc. at the point of production (care being taken to avoid double counting), the value of the services of transport and mercantile agencies added to domestic goods and imports and excises on domestic goods and customs on imported goods should be taken into account. The value of exports (F.O.B.) including gold and silver should be excluded. The value of personal services of all sorts, the annual rental of dwelling houses (whether own or rented), the net increments in the holdings of balances and securities abroad (after deducting similar increments in the home country held by foreign residents), the value of agricultural produce at the point of production which is consumed directly by the producer or exchanged by barter should be included. As the requisite data are not likely to be available for a considerable period, they recommended the compilation of another estimate of India's national income by means of a summation of individual incomes, both for confirming the results arrived at by the census of production method and for correcting certain discrepancies.

The second method (*i.e.*, the census of incomes method) should include the value of all commodities, directly produced and consumed, and of all receipts in kind, at the point of production plus the annual rental value of houses occupied by the owners. The gross money incomes of all individuals, including interest on government loans and pensions of retired Government servants, the interest on war and other non-productive Government loans and the net pensions of ex-Government servants and all interest payments on loans whether for consumption or production should be excluded. Undistributed profits of companies and the net profits of Government commercial undertakings and receipts from customs, excise, stamp and local rates should be taken into account.

They held that for estimating rural incomes the census of production method is more appropriate, while for estimating urban incomes, the census of income method is more suitable. In both cases, detailed sample inquiries in selected areas might, at the first instance be more useful than any attempt at exhaustive surveys covering the whole field. An intermediate population census was also recommended, the ten-year period being too long. There might also be a census of production applied to power-using factories and mines to serve as an additional corrective, though the results might over-lap urban and rural surveys. There should also be a separate census for plantation areas. The Native States should be brought into the picture, provided they are willing to co-operate.

CHAPTER XIX

INDIAN CURRENCY AND EXCHANGE

History of Indian Currency :—Both gold and silver coins circulated in India since the reign of Akbar, but as there were different ruling powers over several areas, there were varieties of coins throughout India and gold and silver coins bore no fixed values between them. In other words, there was confusion and chaos in currency matters.

From 1801 to 1835 :—In order to evolve order out of the prevailing currency chaos, the East India Company started to issue both gold and silver coins with Company's stamp and of a defined legal ratio, weight and fineness. As usual it was difficult to maintain the ratio owing to market fluctuations in the relative values of the metals. Steps were in consequence gradually taken to circulate a standard coin of one metal only and preference was made in favour of silver. In 1818, the silver rupee of 180 grains, 11/12ths fine, was substituted for *gold pagodas* in the Madras Presidency, although the gold coin was not demonetised and was made convertible in the ratio of 15 to 1. The Bombay rupee was also made identical with that of Madras in 1823 and in 1835 the East India Company issued a silver rupee of uniform weight and fineness as the sole legal standard coin throughout its territories. The value of the bullion contents in the rupee was made equivalent to the legal value and this Currency Act persisted until 1893. The genesis of the existing rupee was firmly laid from this time.

From 1835 to 1874 :—The Currency Act of 1835 continued to authorise the minting of gold mohurs and the issue of five, ten and thirty-five rupee gold pieces at market value. In 1841, these gold coins were accepted in payment of Government dues by a Proclamation. Gold was however found to be very much over-valued in 1849-50 under the prevailing ratio of 15 to 1 and consequently gold coins were demonetised by Lord Dalhousie's Government. There was a great demand for silver after 1850 and its value rose considerably. A large part of the existing silver currency was withdrawn from circulation for non-monetary uses.

There was in consequence a great stringency of currency, which was partly met by private issuance of gold coins especially with stamps of the banks of Bombay. In order to meet the acute shortage of currency, the Chambers of Commerce urged the introduction of gold currency and the Government by a Proclamation made it legal to pay Government dues by sovereigns and half-sovereigns at the rate of Rs. 10 and Rs. 5, respectively. The Calcutta Chamber of Commerce reiterated its proposal of the introduction of a gold currency in 1866, and the Government appointed the Mansfield Commission to investigate the whole question. It recommended a gold standard with gold coins and that the Indian currency should consist of gold, silver and paper. By a notification in 1868 rates of sovereigns and half-sovereigns were raised to Rs. 10-8 and Rs. 5-4, respectively. Sir Richard Temple submitted a note to the Government in 1872, confirming the introduction of a gold standard with gold currency, but the Government did not accept these proposals.

From 1874 to 1893 :—The price of silver continued to drop from 1874 and declined from 58*d*. per ounce in 1875 to 27*d*. in 1899. Contributory causes were the demonetisation of silver by Germany in 1873, by Sweden, Denmark and Norway in 1874 and by Latin Union and increased production of the white metal. Simultaneously, the price of gold rose due to the United States and other countries having adopted the gold standard. India therefore became a sink for silver and large additions were made to rupee coins and this led to a rise in prices in India.

The depreciation in the value of silver resulted in a drop in the exchange value of the rupee in terms of the sovereign. The value of a rupee dropped from 2*s*. in 1871 to about 1*s*. 2*d*. in 1892. The Bengal Chamber of Commerce and the Calcutta Trade Association argued in favour of a gold standard for India in 1876 and the Government of India also advocated the same in 1878 with the Secretary of State for India and also proposed to charge a seiniorage for silver rupees in order to restore the relative values of silver rupees and gold coins. During this period, the Government of India adhered to the principle of an international bimetallism, while other countries favoured a gold standard.

From 1893 to 1900 :—The value of silver depreciated further during this period, following the repeal of the Sherman

Act, which required the United States Government to buy 54 million ounces of silver annually for coinage. In 1892 the Government of India again approached the Secretary of State to stop coinage of silver in India with a view to introducing finally a gold standard. The Herschell Committee was in consequence appointed in 1892 to investigate the currency and exchange problems of India. The continued fall in the value of silver with consequential drops in the exchange value of the rupee embarrassed the Government of India financially. She had to remit to England home charges and this expenditure gradually mounted up owing to gradual decline in the exchange value of the rupee. This resulted in continued budget deficits, which had to be met by extra taxation. The Herschell Committee pointed out that although higher taxation incidence may be offset by rises in silver prices in India, there was likely to be a shift of burdens from one class to another. People who suffered due to a rise in prices were hit hard by extra taxation. Although employers benefited by a depreciating rupee, wage earners suffered as prices rose faster than wages. India's foreign trade being largely with gold standard countries suffered a set-back due to a continually depreciating rupee in terms of gold. An element of speculation entered into exchange values. Under these conditions, it was natural that the Government of India favoured the introduction of a gold standard. The falling exchange impeded the flow of foreign, mainly, British capital into India, owing to uncertainty of interest and probable depreciation of the invested capital if it were re-transferred to England. British officials both in Government and private services suffered and complained about the loss, substained in remitting money to England. The Herschell Committee therefore did not favour bimetallism, silver nor gold standard but recommended a limping standard. Under this system there would be no free coinage of gold or silver, rupee would continue to remain an unlimited legal tender and gold would be used only partially for currency purposes with the object of establishing ultimately a full-fledged gold standard. These measures were intended essentially as relating to a transition period and were necessary before adopting a full gold standard. The Government accepted these recommendations and passed an Act in 1893, amending the Coinage Act of 1870 and the Indian Paper Currency Act of 1882. Although the Government under this

Act retained freedom to coin silver, free coinage of silver was suspended. Provision was made to give rupees in exchange of gold coin and bullion at the rate of 16*d.* to a rupee. Sovereigns and half-sovereigns were made legal for paying Government dues. Paper currency was authorised to be issued in exchange of gold coin and bullion at the same rate. These measures aimed at arresting the fall in the exchange value of the rupee and improving the same if possible by encouraging the flow of foreign capital, popularising the use of gold coins and discouraging imports of silver.

As these measures were transitional and rupee gained in value in exchange from 1893 onwards, various representations were made to introduce a gold standard. The Fowler Committee was accordingly appointed in 1898 to investigate the question.

A scheme was submitted to the Fowler Committee by Mr. A. M. Lindsay, Deputy Secretary and Treasurer to the Bank of Bengal and although the Lindsay scheme was rejected by the Fowler Committee, it was adopted later. The scheme recommended the raising in London of a long-period loan of £10 millions to be kept there as the Gold Standard Reserve. The arrangement of 1893 was intended to prevent the rise of the rupee above 1*s.* 4*d.* by making it obligatory on the Government to give rupees in exchange of gold or gold sovereigns. Lindsay's aim was to supplement this plan by making arrangements to give sterling in exchange of rupees so as to prevent the decline of the rupee below 1*s.* 4*d.* It was therefore proposed that the Government of India should sell in India sterling drafts on London for not less than £1,000 at the rate of 1*s.* 3¾*d.* per rupee, which were to be met from the reserve in London. In London, rupee drafts were to be sold to applicants for not less than Rs. 15,000 at the rate of 1*s.* 4.1/16*d.* per rupee, and these were to be met at Calcutta and Bombay. If an excess of rupees accumulated in India in consequence of selling drafts and the reserve in London was unduly depleted, the excess of rupees was to be sold as bullion and the proceeds credited to the reserve in London. If, however, the stock of rupees in India was inadequate, silver was to be brought out of the gold reserve in London and sent to India to be coined into rupees. The essence of this plan was that the rupee was to be the circulating medium in India, and gold was not to be the legal tender.

The Fowler Committee favoured a gold standard with gold currency and recommended that (1) Indian mints should be free to the coinage of sovereigns and half-sovereigns and closed as usual to the free mintage of silver, (2) the exchange rate should be pegged at the fixed rate of 1*s*. 4*d*. to the rupee, being the prevailing rate, (3) rupee should continue to be unlimited legal tender, (4) the Government should continue to give rupees freely in exchange of gold, but should not lend itself to give gold in exchange of rupees, (5) in order to secure the convertibility of rupees into gold, the Government should create a special gold fund created out of the profits of the coinage of silver and the Government should pay gold out of this reserve in exchange of rupees in spite of no legal obligation and (6) the Government should be prepared to make gold available for export in case of India's adverse balance of trade and this gold should come from gold reserves and the fund proposed to be created and eventually from circulation, when sufficient gold would circulate following the introduction of a gold standard with gold currency.

The Fowler Committee was of the opinion that a fixed exchange could be effectively secured only by a gold standard. It recommended practically a limping standard under which both gold and silver could be unlimited legal tender at a fixed ratio, mints being open only to the free coinage of gold. The Government accepted these recommendations and the Act of 1899 made sovereigns and half-sovereigns legal tender throughout India. A Gold Standard Reserve was also formed in 1900 out of the profits of the coinage of rupees on Government account.

The closure of mints to the free coinage of silver resulted in a stringency in the money market as population and trade expanded. The Act II of 1898 was passed by which "the proceeds of Secretary of State's sale of Council Bills could be set aside at the Bank of England in gold as part of the Indian Paper Currency Reserve. The Government of India could issue notes against the gold so set aside, and with them could meet *pro tanto* the Secretary of State's drafts, without reducing their treasury balances." This drained rupee stocks of the Government, which tried to popularise the use of gold coins in 1898-1900 by encouraging payments and receipts at Government offices in gold coins, which however showed a tendency to return to the Government. This was interpreted as a weakness of the experimental gold currency. The Act II of

1898 was again renewed for two years in 1900 and it further authorised the Secretary of State to buy silver out of the gold from the Paper Currency Reserve in London and send the same to India for coinage. The Reserve in London thus served three purposes. It provided funds in London for the purchase of silver for coinage whenever necessary. It could be used to support the Indian exchange whenever India had an unfavourable balance of trade and it was impossible or disadvantageous to sell Council Bills. The Secretary of State would, in these circumstances, use the gold in the Paper Currency Reserve to meet his expenses and an equivalent amount would be transferred to the Paper Currency Reserve in India. Finally, it provided the fund into which payments might be made by the Secretary of State whenever he sold Council Bills in excess of his requirements in order to prevent exchange from rising unduly high and inducing an undesirable shipment of gold to India. Against these payments notes would be issued in India. These provisions were made permanent in 1902. In 1905, £5 millions, which had accumulated in the Reserve in India, were shipped to London to be held in the Paper Currency Chest of earmarked gold at the Bank of England, and a stated part of the Currency Reserve was invested in sterling securities. A substantial part of the Paper Currency Reserve was maintained in gold from 1906. It may be remembered here that the Government resumed the coinage of silver on a large scale from 1900 and the silver was brought out of gold reserve in London to be sent to India.

The Government of India proposed in 1900 to create a Gold Reserve to be kept in India and this should consist chiefly of gold. They also proposed that the Paper Currency Reserve should consist of rupees and securities and ought to be utilised only for encashment of curency notes. These proposals were rejected by the Secretary of State. He preferred to have the gold located in London and invested in sterling securities. The Gold Reserve was therefore, instead of being utilised as a gold redemption fund and maintained for pegging the exchange value of the rupee, regarded as a secondary reserve and as a part of the total surplus Government funds. The task of maintaining the parity of the rupee was discharged by the Paper Currency Reserve and selling Council Bills in London. In consequence the functions of the Paper Currency Reserve, the Gold Reserve and the balances of the Secretary of State became overlapping and confused.

The profits from rupee coinage were remitted to London for investment and gold was withdrawn from the Paper Currency Reserve against fresh rupees coined in India. In order to meet the demand for rupees, in 1906, a special Rupee Reserve known as the Silver Branch of the Gold Standard Reserve was created to prevent the exchange from rising above 1*s*. 4*d*. by offering unlimited rupees in exchange of sovereigns at this rate. The Notification of 1893 authorising the issue of rupees against gold as distinct from British gold coin was withdrawn. In 1904 the Secretary of State announced his intention of offering Council Bills for sale without limit at the price of 1*s*. 4-1/8*d*. If the cash balances in India were inadequate for this purpose, the demand was to be met by withdrawing rupees from the Paper Currency Reserve in India, an equivalent amount of gold being credited to the Paper Currency Chest in London. The price of 1*s*. 4-1/8*d*. not being found prohibitive at the time of the export of sovereigns to India, it was decided to offer Telegraphic Transfers against sovereigns in transit from Egypt and Australia to India, the rate for the Transfers being between 1*s*. 4*d*. and 1*s*. 1/32*d*. so as to make it worth while to divert such sovereigns from India to London.

The Mackay Committee on Indian Railway Finance recommended in 1906 that one million sovereigns out of profits from rupee coinage should be spent on Indian Railways and the Secretary of State decided to spend on railways half the profits of rupee coinage, until the Gold Standard Reserve reached £20 millions, despite protest of the Government of India. This decision of the Secretary of State had to be reversed in 1909, following the exchange crisis of 1907-8.

The Indian exchange became weak from 1907, following the failure of crops and prevailing famines, which diminished India's exports, but imports rose especially in silver. The stock of sovereigns showed a fast declining tendency. The Government undertook to give gold from the Paper Currency Reserve under certain conditions. The situation worsened and the Secretary of State advised the Government to offer Telegraphic Transfers or Reverse Councils on London at the rate of 1*s*. 3.29/32*d*. per rupee, and himself released gold from the Paper Currency Reserve in London against a transfer of rupees to it from the treasuries in India. He had also to float a sterling loan of £4½ millions to maintain his finances, as no Council Bills could be sold. He met

the demand for the encashment of the Reverse Councils by selling the sterling securities in the Gold Standard Reserve in the market. These measures improved the exchange value to 1*s.* 4*d.* and Indian exports started to revive.

Gold Exchange Standard :—Thus we find that between 1898 to 1915, the Government of India unconsciously introduced what is virtually a Gold Exchange Standard on the basis of the Lindsay Scheme. The practice of paying out rupees and notes in India against deposits of gold in the Paper Currency Reserve in London was already in vogue for some time, and in 1904 the Secretary of State had declared his willingness to keep the tap turned on indefinitely and sell the Councils Bills to an unlimited amount at a fixed rate. In 1907-8 the sale of Reverse Councils, providing for the conversion of rupees into sterling for international purposes, laid the foundations of a Gold Exchange Standard. The object of this system was to maintain the gold value of the rupee by selling sterling (Reverse Councils) when the rupee value weakened and by selling local currency (Council Bills) if rupee showed signs of appreciation. It was claimed for the Gold Exchange Standard that it was cheaper than the gold standard, but possessed all advatages of the latter.

The Chamberlain Commission :—A Commission under the chairmanship of Sir Austin Chamberlain was appointed in 1913 to examine the problems of Indian Currency and Exchange. It reported in 1914. The Commission recommended the establishment of the exchange value of the rupee on a stable basis. The authorities in India and England should realise that the main use of the Gold Standard Reserve was to maintain the value of the rupee and gold should be in consequence freely available for export whenever the exchange dropped below the specie point. The experience of the past fifteen years showed that gold currency was not essential for a gold standard, and it would not be advantageous for India to encourage gold in circulation. Gold currency in India was not popular and people in India rather preferred notes and rupees in circulation. Although a mint for gold coinage was not necessary for currency and exchange, a mint for the purpose could be established provided it minted only sovereigns and half-sovereigns. In the absence of such a mint, gold should be accepted at the Bombay mint in exchange of currency. The

Government should encourage the use of notes, but it must be prepared to give the people the currency which they want, be it gold, silver or notes. The internal currency should be fully supported for exchange purposes by adequate gold and sterling reserves. There should be no limit on the accumulations of the Gold Standard Reserve and the Paper Currency Reserve should be utilised to support the exchange as a last resort if the Gold Standard Reserve failed to do so. Profits of rupee coinage should be credited exclusively to the Reserve. A much larger proportion of the Reserve should be held in actual gold. By an exchange of assets between this Reserve and the Paper Currency Reserve, a total of about £10 millions in gold could be immediately secured. This total should be gradually raised, to £15 millions, and thereafter the authorities should aim at keeping one-half of the total Reserve in actual gold. While it was unnecessary and wasteful to hold the entire Gold Reserve in gold, the loss from enforced realization of securities in a time of crisis should be guarded against by maintaining a sufficient amount in liquid form. The Indian branch of the Gold Standard Reserve should be abolished as it had given rise to criticism and was responsible for confusion and doubt as to the efficacy of the Reserve. The proper place for the location of the whole of the Gold Standard Reserve should be London. The Government should undertake to sell bills in India on London at the rate of 1*s.* 3.29/32*d.* per rupee whenever called upon to do so. The Commission virtually recommended the perpetuation of the prevailing Gold Exchange Standard, which was unconsciously evolved. Before any action could be taken on the Commission's recommendations, the war broke out.

Reactions of the War of 1914-18 on Indian Currency and Exchange :—The effects of the war may be studied under two periods, namely August 1914 to Autumn 1915 and Autumn 1915 to the end of 1919. The outbreak of the war dislocated economic conditions by disrupting trade and destroying confidence. In consequence, the exchange weakened, heavy withdrawals were made from savings banks, notes were encashed and heavy demands were made on gold stocks. The Government tackled the situation effectively and restored the exchange by selling large amount of Reverse Council Bills. Demands for withdrawals of savings banks accounts were also fully met. Notes were freely encashed. In order to stop gold drain, notes were not exchangeable for gold

but were made so for silver only. Facilities were freely given for foreign remittances and these measures restored confidence and stable conditions revived by the autumn of 1915.

The second period began from autumn 1915 and continued up to the end of 1919. After working smoothly for some time after 1915, the currency position again became complicated in 1916, following phenomenal rises in silver prices and heavy demand for silver coins in India. The pattern of the foreign trade was reversed after 1915, when exports predominated over imports owing to war supplies and cutting down of imports. In addition, the Government incurred heavy recoverable expenditure in India on behalf of the Home Government for bringing military equipment and financing occupied territories. Purchases on behalf of some Dominions and Colonies were also financed. There was in consequence a heavy demand for Indian currency and as the Government had to sell large Council Bills to finance India's exports, large coinage of silver rupees was undertaken and this embarrassed the Government considerably due to unprecedented increase in the price of silver, following ban on the export of precious metals imposed by several foreign countries. On top of all these factors, a large amount of rupee coins was melted as the bullion value of the rupee was higher than its money value. The continued drop in sterling exchange as compared with that of dollar further aggravated difficulties. As most of the silver had to be purchased in America, the sterling value of silver continued to rise. The price of silver rose from 27 pence per ounce to 89*d.* per ounce, although around 1917, the price was kept within limits by the Governments of United States, Canada and Great Britain by temporarily controlling exports of sillver and its price.

Following large favourable balances of trade for India, Council Bills were sold heavily and this resulted in reduction of rupee reserves. In December 1916, the sale of Council Bills was restricted and in consequence the market rate of exchange varied from the official rate. In order to rectify this, the Government adopted certain control measures, pegging the exchange at 1*s.* 4¼*d.* in January, 1917. The sale of Council Bills was limited to a few selected banks and firms, and they were required to do business with third parties at the prescribed rates, applying their resources mainly to certain selected articles of export of importance to the

Allies. Further fluctuations in the exchange were thus prevented for some time by the co-operation of banks, who were aided by these control measures. As these measures failed to stabilise the exchange, the Government incurred serious losses on coinage of rupees at 16 pence per rupee, while it cost Government about 20 pence. The Government therefore adopted the practice of varying the rates of exchange from August, 1917 and the rate rose from 1*s*. 4½*d*. in January, 1917 to 2*s*. 4*d*. in December, 1919. The rate of selling Reverse Councils also rose from 2*s*. 6*d*. in January, 1920 to 2*s*. 11*d*. in March, 1920.

The Government also adopted special measures to buy silver. In order to stop private competition, no private import was allowed from September, 1917. The Pittman Act authorised the United States Government to sell silver from reserve and the Government of India bought from the United States 200 million ounces of silver in 1918 at 101½ cents per ounce fine. Currency legislation was passed in June, 1917, prohibiting the melting and export of gold and silver coins. Notes of the denomination of 1 and 2½ rupees were issued in December, 1917. In January, 1918, for the first time, nickel coins of the denomination of 2 annas, 4 annas and 8 annas were issued and made legal tender up to one rupee. From June, 1917, the Government acquired gold imported on private account at a price based on the sterling exchange value of the rupee, irrespective of the premium on gold. Notes were issued against gold so acquired, and gold mohurs and sovereigns were coined and issued as currency to supplement the silver Currency. When the restrictions on the export of gold from America were removed in June, 1919 and the gold markets of South Africa and Australia became free, more gold was imported into the country and acquired by the Government. To encourage its import, they raised the acquisition price so as to include the premium on gold as compared with sterling. Gold so obtained was sold to the public fortnightly from August, 1919 with the object of lowering the premium on it. The note issue was increased without the usual metal backing and extra-legal facilities for conversion of notes were withdrawn. Limitations were placed on daily issue of rupees to single tenderers of notes. The Government floated rupee loans of Rs. 130 crores between 1917-19 and roped in a large amount of money by issuing short-term Treasury Bills of 3 to 12 months' maturity from October, 1917. The

Governmental expenditure was kept within limits and taxation was increased.

The Babington Smith Committee :—In order to examine the Indian Currency and Exchange position, a Committee under chairmanship of Sir Henry Babington Smith was appointed in May, 1919 and the Committee mainly recommended that the rupee, unchanged in weight and fineness, should remain unlimited legal tender. It should have a fixed exchange value which should be expressed in terms of gold at the rate of one rupee for 11·30016 grains of fine gold, *i.e.*, one-tenth of the gold contents of the sovereign. The sovereign previously valued by law at fifteen rupees should be made legal tender in India at the revised ratio of ten rupees to one sovereign. The import and export of gold should be freed from Government control as soon as the change in the statutory rate to Rs. 10 had been effected, and a gold mint at Bombay should be opened for the coinage into sovereigns of gold tendered by the public. The Notification of the Government undertaking to give rupees for sovereigns should be withdrawn. The ban on the private import and export of silver should be removed and the import duty on silver should be repealed provided the fiscal position did not demand its retention. The Gold Standard Reserve should contain a considerable proportion of gold and the aim should be to hold the remainder of the Reserve in securities issued by Governments within the British Empire (other than the Government of India) maturing within twelve months. A portion of the gold held in the Reserve, not exceeding one-half, should be held in India.

It also recommended to fix the rupee exchange at 2*s*. gold which was the prevailing rate, but remarked that "if, contrary to expectation, a great and rapid fall in world prices were to take place and if the costs of production in India fail to adjust themselves with equal rapidity to the lower level of prices, then it might be necessary to consider the problem afresh".

The Government of India accepted the recommendations of the Committee and implemented them in practice. The Government declared that Council Drafts and Telegraphic Transfers would be offered for sale weekly by competitive tender with no fixed minimum rate, and that, in future, Reserve Drafts and Telegraphic Transfers would be offered in India, when occasion

so required, at a rate based on the sterling equivalent of the price of 11·30016 grains of fine gold as measured by the prevailing sterling-dollar exchange, less a reduction representing the cost of remitting gold. Despite the steps taken by the Government, they failed to check the rise in the price of gold. The Government announced in February, 1920, that, during the next six months, a minimum of 15 million tolas of fine gold would be sold but this original programme was extended by further sales in August and September. After selling a large quantity at an average rate of Rs. 22 per tota, the gold sales were stopped in October, 1920 and the price of gold, which had been controlled to some extent by the Government sales, showed rises again. By Ordinance No. III of 21 June, 1920, sovereigns and half-sovereigns ceased to be legal tender in payment or on account, but provision was made for their acceptance by the Government at the ratio of Rs. 15 during a moratorium of 21 days, on the expiry of which the restrictions on imports of British gold coin were also withdrawn. The Currency Committee's recommendation that the sovereign should be made legal tender in India at Rs. 10 instead of Rs. 15 was implemented in practice by the Indian Coinage (Amendment) Act, No. XXXVI of 1920. The Act restored the quality of legal tender of the sovereign and half-sovereign, which had been suspended by Ordinance No. III of 21st June, 1920. The rate fixed by the new Act was Rs. 10 to the sovereign and instructions were accordingly issued to treasuries and currency offices that sovereigns and half-sovereigns, if presented, should be received at the rate of Rs. 10 and Rs. 5 respectively, but that they should not be issued. As the market price of the sovereign continued to be above Rs. 10, it never functioned as currency at the new rate. The ban on the import of silver (but not on export) was removed in February, 1920, and also the import duty of four annas per ounce which had been levied was abolished. Similarly, the war-time notifications which had been issued prohibiting the use of gold and silver coin otherwise than as currency, or dealing in them at a premium, were also cancelled. The decline in the price of silver and the return of silver coins from circulation, which began from May, 1920, paved the way for the abolition of the remaining war-time restrictions on the movements of precious metals. The restrictions on the import of gold bullion and foreign coin were also removed in June, 1920. A few days later restric-

tions on the use of silver for making payments on behalf of the Government were withdrawn, and treasury officers were advised that payments in future should be made in the form of currency desired by the payee. Steps were also adopted to renew the extra-legal facilities (for conversion of notes into rupees), which were temporarily withdrawn.

It may be observed here that the Government failed signally in maintaining the rupee value at the artificial rate of 2*s.* gold and there was often a difference of about 3 to 4 pence between the market and official rates of exchange. This involved the Government in a loss aggregating Rs. 35 crores and the attempt to regulate the exchange was abandoned by the third-quarter of 1920. Apart from this huge loss on the sale of Reverse Councils, the failure of the Government to maintain the exchange meant also disaster for the business community. Business people relying on Government's ability to maintain the exchange left themselves uncovered in foreign exchanges and thereby incurred incredible financial losses.

From 1921 to 1925 :—After failing to stabilise the exchange, the Government was content to watch the situation and refrained from taking any active steps.

India's unfavourable balance of trade continued in 1921. There were continued drops in gold prices of commodities and England adopted measures to restore sterling to gold parity. These measures weakened further the rupee-sterling exchange and the exchange dropped to as low as 1*s.* 3*d.* In order to check further decline in rupee values, a large contraction of currency was effected by the transfer of sterling securities held in London to the Secretary of State's cash balance and by the discharge of Indian Treasury Bills held in the reserve. The sale of Council Drafts was also discontinued. From 1922-23, there was a revival in India's export trade and the exchange improved slowly and steadily to 1*s.* 3¼*d.* gold by September, 1923. The Government were trying to take the rate to 1*s.* 6*d.* sterling, which was reached in October, 1924. From now onwards, the Government took measures to prevent the fall in exchange by the practice of the purchase of sterling required for Government remittances and, when necessary, in excess of this requirement, and fresh currency was issued against these purchases, thus relieving to some extent

the monetary stringency occasioned by the Government policy of deflation. The exchange value of the rupee reached 1*s.* 6*d.* gold in April, 1925, and remained there until 21st September, 1931. Then in August, 1925, a Royal Commission on Indian Currency and Exchange was appointed under the presidency of Lt. Commander (Sir) Hilton-Young.

Recommendations of the Hilton-Young Commission :— The Commission submitted its report in August, 1926 and dealt with (*a*) the monetary standard, (*b*) the ratio of the stabilisation of the rupee and (*c*) the creation of a Reserve or Central Bank for India.

Criticism of the Gold Exchange Standard :—The Commission among others pointed out the following drawbacks of the gold exchange standard. The system was complex and the basis of the stabilisation of the rupee was intricate. The currency consisted of two token coins, namely, silver rupees and rupee notes with sovereign, which was never in circulation. There was an obligation to convert freely rupee notes in silver rupees if the value of silver went above a certain level, when rupee coins ceased to be token coins.

There was cumbrous and haphazard multiplication of reserves into Gold Standard Reserve, Paper Currency Reserve and Banking Reserve. The dual control of credit and currency was deprecated. The currency was controlled by the Government, while the credit if at all by the Imperial Bank of India.

The various reserves were arbitarily utilised. Instead of keeping the Gold Standard Reserve mainly in a liquid form, it was largely invested in long term foreign securities (mainly sterling) and to a small extent in short-term ones. Most of the Gold Standard Reserve and a part of the Paper Currency Reserve were unnecessarily kept in London.

Large funds used to be transferred from India to London by sale of Council Bills and these funds exceeded often the normal demands of the Secretary of State. Council bills were often sold at rates below the specie import point even when there was no necessity for funds in London. These surplus funds were invested in London at very low rates of interest. This system also resulted virtually in transferring gold from India to London.

The gold exchange standard was essentially managed by the Secretary of State and thereby lacked in confidence of the Indian people. In addition, the system was more often than not ill managed to the detriment of India's interests.

The system failed to achieve automatic expansion or contraction of currency. A depletion of reserves did not necessarily mean a contraction of currency, which was manipulated by the Government whimsically. So, any purchase of sterling was not always followed by an expansion of currency. As the Government was incapable of assessing the real requirements of the people, the system resulted in practice in bringing about inflation with a continued upward trend in prices.

The system was criticised as being inelastic. It failed to discourage the hoarding habit of the people, who failed to appreciate the economic value of a cheap currency system. The entire system was very expensive and developed in a haphazard manner and its demerits far outweighed the advantages.

Although the system attained exchange stability to a certain degree except during the war period of 1914-18, it failed to secure internal price stability. On the contrary, it encouraged inflation and high prices in the country.

The Commission expressed the view that neither the gold exchange standard nor sterling exchange standard was suited to India. Both depended on the price of silver and if the rise in the price went beyond the melting point of the rupee, the latter would disappear from circulation. The mechanism of an exchange standard is complex and unintelligible to the public, who lack confidence in such a system. India required, the Commission added, some form of a gold standard.

The Gold Bullion Standard :—The Commission recommended the adoption of a gold standard without gold currency. Under the Commission's scheme the obligation to be imposed by statute on the currency authority was to buy and sell gold without limit at rates determined with reference to a fixed gold parity of the rupee but in quantities of not less than 400 fine ounces, no limitation being imposed as to the purpose for which the gold was required, so as to ensure the stability of the gold value of the rupee and the stability of exchange within the gold points corresponding to the selected parity. Gold was thus to be

made the real standard of value. The rupee was to be linked to gold and not to sterling or any other currency or group of currencies. While the system was an absolute gold standard and not an exchange standard, because rupees and notes were to be convertible into gold bars for any purpose, the compensatory mechanism of the exchanges was preserved, as gold bars are not currency. The currency would be expanded when notes or rupees were issued by the currency authority in exchange for gold bars, and contracted when it gave gold bars in exchange of notes and rupees. The practice of giving gold bars and not coins in exchange of rupees, the demonetisation of sovereign and the issue of gold savings certificates as proposed by the Commission would not allow hoards to disturb internal prices and money rates. The Commission also recommended that selling prices of gold should be fixed at such rates as would make possible the replenishment of the stock of gold without loss by importation from London.

The Commission suggested the removal of the legal tender quality of the sovereign as long as the amount of gold in the reserves was not adequate for the introduction of a gold currency, and pending a definite decision being taken in favour of a gold currency. Otherwise, the gold from the reserves might pass into circulation, preventing any contraction in the currency and counteracting the compensatory effect of the exchanges.

The Commission recommended that the existing anomaly in the Indian currency system due to the obligation of the Government to convert one form of note, namely the note printed on paper, into another form, namely the rupee, which is merely a note printed on silver, should be removed. The promise of converting the existing notes into rupees must be kept, but no obligation for conversion into silver rupees should attach to the new notes. It was, however, essential that facilities for the free exchange of notes for rupees should be provided, so long as the people desired to obtain metallic rupees, in order to inspire public confidence and ensure the popularity of the note issue.

The Commission also recommended the re-issue of the one-rupee note with full legal tender quality and like the other notes of the new status, they should not be legally convertible into silver rupees. Having withdrawn the existing legal right of convertibility of notes into rupees, it was necessary to impose a

statutory obligation on the currency authority to convert all notes, excepting the one-rupee note, on demand into legal tender money, that is, into notes of smaller denominations or silver rupees at the option of the currency authority, though reasonable demands of the public for metallic currency should be met in practice by the authority.

Unification and Composition of Reserves :—The Commission recommended that the paper currency and gold standard reserves should be combined into one currency reserve so as to ensure the efficiency of its working and make it simpler and more intelligible to the public. It was also proposed that the composition and proportion of the reserve should be laid down by statute so as to ensure automatic expansion and contraction of currency and the compensatory effect of the exchange. The proportional reserve system should be adopted, and gold and gold securities should form not less than 40 per cent of the reserve. The currency authority should attempt to work up to a reserve ratio of 50 to 60 per cent. The gold holding should be increased to 20 per cent of the reserve as soon as possible, and 25 per cent within ten years. At least one-half of the gold holding should be substantially reduced during a transitional period of ten years. The balance of the reserve should be held in self-liquidating trade bills and Government of India securities. The 'created securities' should be replaced by marketable securities within ten years. The sum of Rs. 50 crores might be regarded as the approximate liability regarding the contractibility of the rupee circulation. An amount equal to one-fifth of the face value of any increase or decrease in the number of silver rupees in issue should be added to or subtracted from this liability, and the balance of profit or loss should accrue to or be borne by the Government revenues.

The Commission also recommended that the rupee securities of the Government of India held in the reserves should be restricted to an amount equal to so much of the circulation as was unlikely to be withdrawn, plus such further amount as could be easily realized without disturbing the Government's credit. These securities are less desirable as assets than trade bills, which, unlike the former, possess the quality of automatically expanding and contracting currency according to the needs of the country.

Moreover, a larger holding of the Government securities would render their realization, in case of need, difficult.

The Government published three bills in 1927, embodying the above recommendations, namely, (*a*) a Bill to establish a gold standard currency for British India and constitute a Reserve Bank of India, (*b*) a Bill to amend the Imperial Bank Act, 1920, and (*c*) a Bill further to amend the Coinage Act of 1906 and the Paper Curency Act of 1923 for certain purposes, and to lay upon the Government certain obligations in regard to the purchase of gold and the sale of gold (later altered to sterling) exchange.

Stabilisation of the Rupee :—The Commission recommended the stabilisation of the rupee. It proposed that the rupee should be stabilized in relation to gold at a rate corresponding to an exchange rate of 1*s*. 6*d*. for the rupee, thus giving it the value of 8.47 grains of gold. This rate was fixed, because the Commission felt that this rate was in adjustment with the then prevailing world prices and wages had also adjusted to that rate.

Regarding the 1*s*. 4*d*. rate which was claimed by some to be the natural rate, the Commission argued that the only rate which could be regarded as rational was the figure at which prices were in adjustment with the existing volume of currency and in equilibrium with external prices. Considered from this point of view 1*s*. 6*d*. appeared to them to be clearly the 'natural' rate under the existing circumstances.

The reversion to 1*s*. 4*d*. was bound to produce a general rise of prices to the extent of 12½ per cent and would press severely on consumers in general and especially on the poorer paid members of the literate classes. It would also result in an arbitrary reduction of the real wages of labour for which there was no justification in equity or in expediency. The finances of the Government, central and provincial, would be seriously upset by a reversion to 1*s*. 4*d*.

Sir Purshottamdas Thakurdas, in his Minute of Dissent strongly expressed himself in favour of 1*s*. 4*d*. and deprecated 1*s*. 6*d*. mainly on the following grounds. No adjustment in wages had taken place and none was likely without a struggle. Pending adjustment, the 1*s*. 6*d*. ratio presented the foreign manufacturer with an effective, though indirect, bounty of 12½ per cent, which would place a heavy strain on Indian industries. A change in the

ratio would mean an additional burden of $12\frac{1}{2}$ per cent on the large bulk of the debtor class who were chiefly agriculturists. The debt being an old one of long standing, it was natural to assume that it was mostly contracted on a 1*s.* 4*d.* basis. The adverse effect on public finances of a reversion to 1*s.* 4*d.* had been exaggerated. The adverse effects of 1*s.* 4*d.* on a small section, comprising about 21 per cent of the population (consisting of the poorly paid members of the literate classes) must be allowed less weight than the suffering which the higher ratio would entail on the remaining 79 per cent of the total population. Regarding labour, the existing rate of wages was sufficiently high to cover a possible rise in prices caused by the adoption of 1*s.* 4*d.* Besides there was the compensating advantage of a continuity of employment following the lower ratio which would ensure greater prosperity to industry and agriculture, while the higher ratio was certain to injure both. The ratio of 1*s.* 4*d.* prevalent before the war of 1914-18 was disturbed as a result of the war in common with the ratios of other countries which had invariably tried to restore their pre-war ratios. Even if it were granted that the disturbance involved in either case was equal, the decision should still be in favour of 1*s.* 4*d.*

It may be observed that this ratio controversy was hanging fire for a few years and the Government, accepted and maintained the 1*s.* 6*d.* ratio in the teeth of opposition, believing that economic adjustments were already made around 1*s.* 6*d.*

It was true that sufficient statistical data did not exist to justify either side, but one is inclined to think that prices and wages had been adjusted to 1*s.* 6*d.* for some years prior to the fixation of the rate to this level.

The entire situation was further complicated by the beginning of the Economic Depression from 1929 and England having gone off the gold standard in September, 1931. The Government in consequence had to adopt special financial measures to maintain the exchange at 1*s.* 6*d.* such as currency contraction, the issue of Treasury Bills to Exchange Banks and other purchasers so as to control credit in the interest of the firmness of exchange, raising the bank rate of the Imperial Bank of India, etc. The Government was also confronted with severe difficulties in securing the necessary sterling funds for remittance to London in the years 1929-30 and 1930-1. The Government were not only unable to

purchase sterling, but they had actually to sell sterling to meet the demand, which arose. Later they had to sell Reverse Councils to support the rupee.

The Currency Act of 1927 :—The above Act imposed a statutory obligation on the Government to maintain the 1*s*. 6*d*. rate. Under the Act, the Government would purchase gold in unlimited quantities at the Bombay Mint at Rs. 21-3-10 per tola of fine gold in bars containing not less than 40 tolas (15 oz.). Holders of legal tender currency (silver rupees and paper notes) were entitled to obtain on application to the Controller of the Currency, Calcutta, or the Deputy Controller of the Currency, Bombay, either gold at the Bombay Mint, or at the option of the Government, sterling for immediate delivery in London, provided they demanded and paid for an amount of gold or sterling of not less than 1,065 tolas (400 oz.) of fine gold at the rate of Rs. 21-3-10 per tola of fine gold. Sterling was to be sold at the same price after allowing for the normal cost of transport from Bombay to London. A rate of 1*s*. 5.49/64*d*. was notified as the Government selling rate for sterling to meet these obligations. Sovereigns and half-sovereigns ceased to be legal tender in India, but the Government was to receive these coins at all currency offices and treasuries at bullion value reckoned at Rs. 21-3-10 per tola of fine gold, that is, Rs. 13-5-4 per full-weight sovereign. Since the Government had the option of either giving gold or sterling, the system thus established was in practice a Sterling Exchange Standard, although it was virtually a gold exchange standard as long as sterling remained at par with gold, that is up to 20th September, 1931. The system thus established was an improvement over the previous one in so far as it established a statutory gold parity for the rupee and imposed a statutory obligation on the Government to buy gold and sell gold or sterling at fixed rates.

The system was subjected to severe strain when England went off the gold standard on 21st September, 1931 along with other countries. On the same day, the Governor-General promulgated an Ordinance suspending the operation of the obligation to sell gold or sterling, but the Government reiterated its resolve to maintain the ratio at 1*s*. 6*d*. sterling. On 24th September the Governor-General promulgated another Ordinance, called the Gold and Sterling Sales Regulation Ordinance, repealing the previous one and thus technically restoring the provisions of the

Currency Act of 1927 and intended in practice to exercise an effective control over the sale of sterling. The Government thus introduced a controlled sterling exchange standard. Under the terms of the new Ordinance, sterling was to be sold to recognised banks, which were expected to realize their responsibilities in the matter. It was to be sold at the rate previously in force, *i.e.*, 1*s*. 5.49/64*d*. per rupee, for financing normal trade requirements and contracts completed before 21st. September, and for reasonable personal and domestic purposes. It was not to be sold for financing imports of bullion or speculative exchange transactions. These precautions were adopted in order to prevent undue strain on the Government's gold and sterling resources and to prohibit the flight of capital from India. Such a control was to be exercised through the agency of the Imperial Bank. The rupee, being linked to sterling, was inevitably involved in the depreciation and fluctuations of the latter in relation to gold and to currencies still based on gold, *e.g.*, the dollar and the franc. The rise in the value of gold in terms of sterling as reflected in the sterling-dollar cross-rate meant a corresponding rise in its value in terms of rupees. The price of gold in the bullion market, which was Rs. 21-13-3 per tola towards the end of August, 1931, rose to as high as Rs. 29-2-0 in December, 1931. The stimulus of high prices and the economic distress of rural areas obliged people to sell their gold. About Rs. 50 crores worth of gold was thus exported from India between the end of September, 1931 and the end of February, 1932. The export of gold however reacted favourably on India's balance of trade. The supply of sterling created against the gold exports came to be in excess of the demand for it, and rendered restrictions on the sale of sterling by the Government superfluous. This enabled the Government to repeal the Gold and Sterling Sales Regulation Ordinance on 31st. January, 1932. The Currency Act of 1927 was again restored, but the Government adhered to its intention of maintaining the ratio at 1*s*. 6*d*. sterling and so India virtually got the sterling Exchange standard, which was criticised for encouraging export of gold from India and linking rupee to sterling at 1*s*. 6*d*. The Government claimed that instead of allowing the rupee to drift and cause exchange fluctuations, it was better to stabilise it with sterling at 1*s*. 6*d*. As the Government had large sterling obligations to meet, it would be impossible to find funds

for the purpose unless the rupee was linked to sterling. Indian budgeting would be reduced to a gamble in exchange in the absence of a stable sterling rupee. A stable exchange was desirable for a debtor country like India and it was likely to help her foreign trade, because a large part of her trade was with sterling countries. As the rupee depreciated in terms of gold, her export trade was likely to expand with gold standard countries. Critics pointed out that by linking rupee to sterling India's fortune was tied to the chariot wheel of England. India was not left alone to decide her currency and exchange in accordance with her internal price level and trade requirements. Advantages to export to gold standard countries like the U.S.A. were partly counterbalanced by disadvantages to import from such countries. The linking of the rupee to sterling constituted a hidden form of Imperial Preference granted to England. It was apprehended that the Government's attempt to stabilize the rupee even at the lower gold value of 1*s.* 6*d.* might involve the dissipation of the remaining gold reserves of the country. It was also argued that though the rupee depreciated in terms of gold, it continued to be overvalued in sterling at 1*s.* 6*d.*, while the yen and other currencies remained devalued in sterling. India was thus clearly placed at a disadvantage.

Gold Exports from India :—After England abandoned the gold standard in September, 1931, there was a large export of gold from India to the tune of Rs. 351·40 crores by the end of January, 1940. This was claimed to be distress gold, because people were living on capital. This drainage weakened India's position. The Government claimed on the other hand that the gold which was sold was not currency gold but commercial gold and people sold it as they were reaping large profits. When the price again drops, this gold would return to the country. India's gold hoards estimated at about £750 million will not be in jeopardy by this export. In addition exports of gold helped trade and encouraged productive enterprises. It reacted favourably on the balance of trade and converted "inert metal into live currency". It produced a welcome effect on the Government's financial position regarding sterling remittances to the Secretary of State and the fortifying of the sterling reserves. It appeared to keep the rupee-sterling exchange stable at 1*s.* 6*d.* and improved the position of India's credit in the city of London and the world. The exports

of gold brought about an increase in the note circulation, holdings of postal cash certificates, postal savings deposits and bank deposits and largely created cheap money conditions, which assisted business recovery in the country.

Exchange Obligations of the Reserve Bank of India :— Under the Reserve Bank of India Act 1934, the Reserve Bank is required to maintain the existing ratio (1*s.* 6*d.* sterling) between fixed upper and lower points as though the rupee was on a gold basis. The Bank is required to sell sterling to any person who makes a demand in that behalf at its office in Bombay, Calcutta, Delhi or Madras and pays the purchase price in legal tender currency, for immediate delivery in London, at a rate not below 1*s.* 5.49/64*d.* for a rupee. This provision is aimed at preventing the rupee from falling below 1*s.* 5.49/64*d.*, which corresponds to the lower point of the rupee (*i.e.*, 1*s.* 6*d.* minus the cost of taking down in London this amount of sterling). It is also obligatory on the Bank to buy sterling from any person who makes a demand in that behalf at its office in Bombay, Calcutta, Delhi or Madras for immediate delivery in London, at a rate not higher than 1*s.* 6.3/16*d.* for a rupee, which corresponds to the upper point of the rupee (*viz.*, 1*s.* 6*d.* plus the cost of importing this amount of sterling from London to Bombay). It has also been provided that no person shall be entitled to buy or sell an amount of sterling less than ten thousand pounds. Thus the above Act legalised the existing ratio and continued the Sterling Exchange Standard. The Reserve Bank was made the sole currency authority in charge of the Currency Reserve which abolished the separate Currency Reserves.

The ratio of 1*s.* 6*d.* was more or less effectively maintained up to the beginning of the World War II, which brought forth entirely new circumstances.

Effects of the World War II on Indian Currency and Exchange from September, 1939 :—The immediate reaction of the war was favourable. India's production, trade and prices showed an upward trend and there was prosperity for the agriculturists. Although in the beginning there was some demand for encashing notes, the Indian Currency and Exchange withstood the strain of the war rather well. The rupee exchange tightened and the Reserve Bank found no difficulty in bringing sterling for

paying charges to England and strengthening external assets of the currency reserves. This trend was in contrast with that of World War I, when the exchanged weakened and the rupee ratio was supported by Government's sale of sterling. Although the rupee remained firm in relation to sterling, its exchange value in relation to dollar and other foreign countries showed a weakening tendency, following weakness of the sterling.

The Reserve Bank of India met demands of the people by giving rupee coins in exchange of notes and the rupee stock of the Bank dropped to Rs. 35·1 crores by 21st June, 1942 and this was below the statutory limit of Rs. 54 crores. An Ordinance was in consequence passed on 25th June, 1940, making it illegal to possess rupee coins in excess of one's requirements. On 24th July, 1940, one-rupee notes were issued and the silver content of ½ rupee coins was reduced. Two-rupee notes were issued in February, 1944, and steps were taken to withdraw old rupees and ½ rupees from circulation.

A famine started in small coins in 1942. During the first two years of the World War II, small coins were absorbed, exceeding Rs. 8 crores, compared with Rs. 5 crores during four years of World War I. A Notification was issued in 1942, making it illegal to possess small coins in excess of one's personal requirements. Dealings in small coins except at their face value were banned by Defence of India Rules. Government also minted new series of small coins feverishly and weights of these were also changed. A new ½ anna nickel brass coin was issued in January, 1943 and a new piece of 30 grains in stead of 75 grains was issued in February, 1943. The standard weights of 4 anna, 2 anna, 1 anna and ½ anna pieces were fixed at 90, 60, 45 and 30 grains, respectively, from 23rd January, 1943.

Indian currency expanded enormously during and after the World War II and this currency expansion was covered by increasing mainly sterling securities and to some extent rupee securities. The Reserve Bank Act of 1934 requires that not less than 2/5ths of the assets of the Bank should consist of gold coin, gold bullion or sterling securities, provided that the total value of gold stock should never be below Rs. 40 crores. The Act also lays down that rupee securities should be restricted to ¼th of total assets or Rs. 50 crores, whichever is higher and could be increased by Rs. 10 crores in emergencies subject to the consent

of the Governor-General. In 1941, legal provision was made to keep rupee securities up to 3/5ths of the total assets.

It may be observed that the Government passed in January, 1946, a Demonetisation Ordinance, demonetising notes of Rs. 500, Rs. 1,000 and Rs. 10,000 and the public were asked to exchange these notes with notes of smaller demoninations. The object of this Ordinance was to strike at black-marketing which was largely conducted through the medium of such notes, rope in a large amount of money from tax dodgers and from those who piled up fortunes by taking illegal gratifications. The immediate reaction of the Ordinance was a panic among the people, who lacked confidence in the note issue. In practice, the deflationary effects of the Ordinance remained of rather dubious value and the Government hardly succeeded in detecting tax evasions. It is true that it kept black-marketing within limits.

Consequently, the composition of the Paper Currency Reserve was fundamentally changed. In September, 1939, the Paper Currency Reserve was composed of 35 per cent in silver coin, 20 per cent in gold, 28 per cent in sterling security and 17 per cent in rupee security. It consists at present of 3·3 per cent in gold coin and bullion held in India, 58·7 per cent in foreign securities, 3·9 per cent in rupee coin and 34·2 per cent in Government of India Rupee securities.

Purchase of Sterling by Public Tender :—Originally, the Secretary of State was responsible for transferring funds from India to London. He used to do so by selling Council Bills and Telegraphic Transfers in London and payable in rupees in India. In 1923-24, although the rate of weekly sale of Council Bills was retained, the system of selling Intermediaries at higher rates was stopped. In stead, the Government of India began to buy sterling from the Exchange Banks and other private financial agencies through the Imperial Bank of India and this was encouraged in 1924-25, when the sale of Council bills was limited to actual demands for them. There was no sale of Council Bills in 1925-26. The Hilton Young Commission recommended the purchase of sterling by competitive public tender and the publication of weekly returns of such purchases. These recommendations have been implemented in practice from 1927. Tenders are invited on one day in the week, usually Wednesday, simultaneously in Calcutta, Bombay and Madras and the amount allotted to each rate is

published on the following day. Intermediaries are also sold at these centres on other days of the week at 1/32*d.* higher than the rate at which tenders were accepted the preceding day. Since April 1, 1935, the Reserve Bank has been the sole authority for the purchase of sterling. This system is an improvement on the Council Bill method in so far as it enables the Indian authorities to buy sterling at favourable terms, especially, during periods when there is a big demand for rupees. This enables the authorities to prevent the exchange going above the fixed rate. This system facilitates financing of India's foreign trade by enabling Exchange Banks to get rupees in India in exchange of their sterling balances in England and they can again replenish such balances by discounting Indian export bills on maturity. The system however is open to the objection that since India's debtors are mostly concentrated in London, India does not get the change of buying sterling at the place, where it is likely to be available directly. The following table illustrates the amount of sterling bought by the Reserve Bank from time to time.

STERLING TRANSACTIONS OF THE RESERVE BANK OF INDIA

	Purchases		Sales		Net Purchases (+) / Sales (−)	
	£ thousands	Rs. lakhs	£ thousands	Rs. lakhs	£ thousands	Rs. lakhs
1946-47 ..	33,769	4,503	99,305	13,253	−65,536	− 8,751
1947-48 ..	135,002	18,000	58,254	7,774	+76,748	+10,226
1948-49 ..	30,030	4,004	82,688	11,035	−52,658	− 7,031
January 1948 ..	20,375	2,717	480	64	+19,895	+ 2,653
February „ ..	23,970	3,196	475	63	+23,495	+ 3,133
March „ ..	7,452	994	175	23	+ 7,277	+ 970
April „ ..	5,175	690	480	64	+ 4,695	+ 626
May „ ..	4,345	579	795	106	+ 3,550	+ 473
June „ ..	2,225	297	8,245	1,100	− 6,020	− 804
July „ ..	2,650	353	12,242	1,634	− 9,592	− 1,280
August „ ..	4,430	591	10,175	1,358	− 5,745	− 767
September „ ..	1,375	183	7,530	1,005	− 6,155	− 822
October „ ..	2,250	300	4,605	615	− 2,355	− 315
November „ ..	3,100	413	7,855	1,048	− 4,755	− 635
December „ ..	1,075	143	7,022	937	− 5,947	− 794
January 1949 ..	550	73	9,599	1,281	− 9,049	− 1,208
February „ ..	1,305	174	9,540	1,273	− 8,235	− 1,099
March „ ..	1,550	207	4,600	614	− 3,000	− 407

Echange Controls During and After World War II :— Since exchange controls are associated with foreign trade, these controls imply regulation of both import and export trades. The Exchange Control in India is administered by the Reserve Bank of India through its Exchange Control Department, while import and export trades are regulated by the Ministry of Commerce in consultation with the Export and Import Advisory Councils.

The basic principle of exchange controls is to preserve foreign exchanges and utilise the same to the optimum benefit of the country. Import licensing was first introduced in May, 1940, when the Government initiated the practice of issuing licenses for importing goods of particular countries and the Reserve Bank accordingly prohibited the remittance to any country in payment of imports, unless the importer possessed an import license. Gradually the scope of the import control was widened with a view to conserve foreign exchange and economise in shipping space. Restrictions were also placed on foreign remittances and on travelling outside India without a permit from the Reserve Bank of India. These import controls and restrictions on foreign remittances are still continuing.

Export controls were also introduced in order to prevent the supplies of goods to enemy countries and to conserve the supplies of certain categories of goods for the allies and for India. In March, 1940 a scheme was introduced by the British Government known as the Empire Scheme by which the foreign exchange proceeds of exports to some hard currency areas were controlled. Exports to hard currency countries were allowed provided a certificate was furnished by an authorised dealer in foreign exchange in India that the proceeds of exports have been disposed of in accordance with the approval of the Reserve Bank. Export controls continue to operate.

Exchange controls with the concomitants of import and export trade regulations have been persisting even to-day. Although India has joined the International Monetary Fund, which aims at the cessation of all exchange controls, India has been allowed to retain them during the transition period, until equilibrium is reached in her balance of payments and stable conditions return.

India has exchange controls with all countries in the world excepting Pakistan. This has been rendered possible by the fact

that simultaneously with the separation of their currencies on July 1, 1948, India and Pakistan came to a monetary and payments agreement. The main terms of this agreement, which is in the first instance valid for a period of one year, are that each party will hold the currency of the other up to a limit of Rs. 15 crores, that thereafter up to a further limit of Rs. 10 crores accounts will be settled in free sterling and the balance in sterling in Account No. II. The reason for entering into an agreement of this kind was that the Governments of both Dominions were anxious to ensure that the obstacle to inter-Dominion trade, which the imposition of exchange control would necessarily entail, should, if possible, be avoided. This agreement has worked satisfactorily and that currency considerations have not stood in the way of Inter-Dominion commerce.

The Working of Foreign Exchange Control in India :— In order to understand the mechanism of the Exchange Control Organisation as it, at present, operates in India, it is essential to have a clear conception of the Control now existing in the United Kingdom as well as in the other Dominions and colonies popularly known as the "Sterling Area" but now technically designated as the "Scheduled Territories," because the Indian Control is largely modelled on U. K. Control and its main objects and fundamental principles are similar to those of the other Sterling Area countries. Prior to the passing of the Foreign Exchange Regulation Act, 1947 (Act No. VII of 1947) by the Indian Parliament, exchange control operations were regulated by the financial provisions of the Defence of India Rules as continued by the Defence of India Act, 1939. Dealings and transactions in foreign currency in India are governed by the Foreign Exchange Regulation Act, 1947 and various other Notifications issued by the Government of India in this behalf. Important provisions of the Act in relation to Exchange Control are:—

(*A*) Prohibiting the export of money or gold from India except with the permission of the Reserve Bank of India.

(*B*) Prohibiting (*i*) any person from acquiring foreign exchange or transferring any rupees, gold coin, or bullion or securities with a view to the acquisition of foreign exchange except from persons authorised by

the Reserve Bank of India to deal in foreign exchange and (*ii*) any person from buying or borrowing from or selling or lending to any person not authorised by the Reserve Bank of India, any foreign exchange other than Gold Sovereigns.

(*C*) Empowering the Government of India to:

(*a*) call for returns of holdings of foreign exchange; and

(*b*) require any person who owns any foreign exchange to offer it for sale to the Reserve Bank of India at such price as the Government may fix.

In addition, numerous other restrictions have been placed on dealings in foreign exchange with a view to tighten up control of all kinds of foreign exchange operations. Like its U. K. counterpart, the Indian Control has also placed different kinds of restrictions on different groups of countries and for this purpose a list of the "Scheduled Territories" has also been published by the Government of India.

In exercise of the powers conferred by the Foreign Exchange Regulation Act, the Reserve Bank of India has licensed certain banks to deal in foreign exchange. Banks so licensed are known as Authorised Dealers in Foreign Exchange. Some banks have been licensed to deal in all currencies whereas others have been licensed to deal in specified currencies only. All foreign exchange transactions should be conducted through the medium of banks authorised to deal in foreign exchange. The various regulations framed by the Reserve Bank of India from time to time governing transactions in foreign exchange are advised to these Authorised Dealers and it is the duty of the Authorised Dealers to see that all their transactions are conducted according to instructions issued by the Reserve Bank. All transactions in foreign exchange conducted by the Authorised Dealers must take place on the basis of rates to be fixed by the Control Authorities. In practice, these rates are actually fixed by the local Exchange Banks Association in consultation with the Reserve Bank and the rates are mainly based on the London Control rates combined with the Rupee/Sterling exchange rate. Sales of foreign currencies by Authorised Dealers to the general public can only be made for certain approved purposes and in cases where prior approval of the Control is necessary sales should be made after such approval is obtained. Purchase of foreign currencies by the

Authorised Dealers from the general public should also be made according to regulations and in case where prior approval is necessary, purchases should not be made before such approval is given. Purchase of Rupees in London against Sterling by non-residents is allowed, but the Sterling must be provided by a transfer from the non-resident Sterling Account of the purchaser or by a sale of his foreign currency to the London Control if such method of payment is permissible under the United Kingdom regulations. Sale of foreign currencies to Authorised Dealers by their bank branches and correspondents to enable them to lay down rupee funds is permitted provided the currency sold is that of a country of the same monetary area in which the bank branch or correspondent is situated. Sale of foreign currencies against rupees by Authorised Dealers to their Overseas bank branches or correspondents can only be made subject to the prior approval of the Reserve Bank. Authorised Dealers are not allowed to sell one foreign currency against another or against Sterling in a centre outside the Sterling area. In the event of Authorised Dealers being unable to cover their requirements of foreign currencies by purchases from other Authorised Dealers, they are permitted to effect purchase from the London Control with the prior permission of the Reserve Bank. Similarly, Authorised Dealers are required to sell any surplus holding of foreign currencies to the London Control through the medium of their London Agents.

Import of goods from countries outside India is subject to restrictions. Certain goods are placed on the Open General Licence and for importing these goods, no licence will be necessary. In other cases, licence for importing goods should first be obtained by the importers from the Import Trade Control Authorities. All import licences are issued in duplicate, one copy marked "Customs Purposes" and the second copy marked "Exchange Control Purposes." Exchange Control copy acts as an authority to a bank to sell foreign exchange to the importers. Import of foreign currency notes beyond a certain fixed limit is restricted in all cases. Remittances against imports may either be made in the currency of the country of origin of goods or by payment in Sterling or Rupees to the account of a resident in that country according to the method of payment permitted for transactions with the country concerned.

Payments to foreign countries may be regarded as belonging to the following categories:—(*i*) Imports, (*ii*) Maintenance and private payments, (*iii*) Travel, (*iv*) Business and Trade purposes, and (*v*) Capital transfer. Remittances to Sterling area countries may be made in Sterling or Rupees or Sterling area currencies. Remittances to countries outside the Sterling area may be made in the foreign currency of the country concerned or by a transfer in Sterling or Rupees to the account of a resident therein. Transactions with a large number of countries are governed by payment or monetary agreements some of which preclude transactions in currencies other than those of the Sterling area. In such cases, remittances may only be made by means of transfers to the Sterling or Rupees accounts of residents in the countries concerned. Although different methods of payments have been prescribed by the Control for different groups of countries, they follow the general principles as stated above.

Export of goods from India to foreign countries is only permitted provided the shipper makes a declaration on G. R. form that foreign exchange representing the fair market value of the goods has been or will be disposed of in a manner approved by the Reserve Bank of India. All shipping documents must pass through the medium of an Authorised Dealer and payments for goods must be received within a period of six months. Different methods of payments for different groups of countries have been provided for by the Reserve Bank and payment for the exported goods must be received in the approved method only. Export of gold, bullion, jewellery or securities is prohibited without permission of the Reserve Bank. In cases where permission is given to export securities, etc., sale proceeds must be repatriated to India within the stated time and in the approved manner. All exports must be paid for by payment in approved method as determined by the Reserve Bank.

Payments in foreign currency may be received by drawing bills in foreign currency on a bank or importer in the country to which the goods are being shipped or by a remittance from that country.

Payments in Sterling may be received by drawing bills in Sterling on London under letters of credit registered with the Bank of England or by drawing bills in Sterling on the country of import providing for payment in Sterling from the appropriate

Sterling account. Payments in Rupees may be received by drawing bills in Rupees on the country of Import providing for payment in Rupees from the Rupees Non-resident Account of a bank in the country of import or by payment in Rupees from the account of a bank in the country of import.

Accounts of individuals, firms and banks permanently resident outside India are known as non-resident accounts, but the treatment of the accounts of banks is different from that of individuals or firms. Same conditions govern payments to and from the Rupee Accounts of non-resident banks as apply to the Sterling accounts of residents in the corresponding countries or monetary areas. Before any non-resident accounts of persons and firms other than Banks can be opened, reference should be made to the Reserve Bank of India with particulars as to the purpose for which the account is required and the identity of the account holder. The Reserve Bank of India will then advise what credits and debits can be allowed in the account.

Though India was partitioned in August, 1947 by the creation of two independent Dominions, exchange control operations of both the Dominions used to be regulated by the Reserve Bank of India on a separate accounting procedure for each Dominion till June, 1948. From 1st July, 1948, Foreign Exchange operations of both Dominions have been completely separated. At present, there is no restriction of Rupee transfers from one Dominion to another and the Central Banking Institution of each Dominion is prepared to sell or buy unlimited amount of currency of the other Dominion at a nominal commission. So far as foreign exchange transactions are concerned, Authorised Dealers of one Dominion cannot undertake any kind of exchange business for the other Dominion. The authorities of both Dominions have already concluded agreements for the regulation of Exchange Control business between the Dominions and Authorised Dealers of each Dominion are required to conduct their business on the basis of this agreement.

Empire Dollar Pool:—Before World War II, generally all countries belonging to the so-called "Sterling Block" used to maintain all or nearly all their foreign exchange balances in London in sterling. As sterling was then freely convertible, any country could easily convert its balances into foreign currencies

at its own option, but this system assumed a rigid form after World War II, when the convertibility of sterling became increasingly difficult. Those members of the "Sterling Block" who continued to be members of the present "Sterling Area" agreed to forego their right to hold foreign exchange in their own custody and they voluntarily imposed restrictions on the use of foreign exchanges in order to ensure that the limited resources of foreign exchanges in the sterling area were utilised to the best advantage in the prosecution of war. The entire holding of foreign exchanges of the sterling area was in consequence held in one pool in the custody of Bank of England and the British Treasury. The arrangement is that countries of the sterling area hold all their foreign exchange reserve in sterling, selling currencies which they do not require to the Bank of England and buying from the latter currencies of which they are in short supply. As a consequence, there is always in the custody of the Bank of England a pool of foreign exchange from which members of the sterling area can buy for sterling the currencies which they need. A more correct name for this arrangement would be "the Sterling Area Pool of Foreign Exchange". It has come to be known as the Empire Dollar Pool only because the most important of the foreign exchanges in the pool is the United States dollar. The individual countries of the sterling area were given no specific allotments of the various foreign currencies which they were entitled to spend.

The countries concerned agreed not to spend any foreign exchange except for essential purposes and unless the demand could not be satisfied within the sterling area. The test of essentiality varied from time to time as the volume of the Pool increased or declined. At the conclusion of the war, and for a considerable period before it, the test was whether a particular demand was necessary for the prosecution of the war or for the maintenance of the civil economy at a war-time level. The member-country itself was always the judge of the essentiality of its own requirement and when it certified that a particular requirement was essential and its exchange control had granted the necessary authorization, the Pool never questioned the decision taken. At the end of the war, the definition of essentiality applicable till then lost its meaning and the Government of India was more liberal in the classification of requirements as essential than they had been in the past.

Figures have been published by Government from time to time of India's earnings of dollars and other hard currencies and of her expenditure of these currencies. From September, 1939 up to the 31st March, 1946 we earned Rs. 405 crores worth of United States dollars and spent Rs. 240 crores worth of United States dollars, leaving a surplus of Rs. 165 crores. On the other hand, in the same period we spent net Rs. 51 crores worth of other hard currencies, namely those of Canada, Switzerland, Sweden and Portugal, so that our net surplus on hard currency account was Rs. 114 crores. During the year 1946-47 we had a deficit in the balance of payments with the United States of Rs. 15 crores, having earned Rs. 83 crores and spent Rs. 98 crores, and a deficit in the balance of payments with other hard currency countries of Rs. 7 crores. It may therefore be assumed that we contributed net to the pool between September, 1939 and March, 1947 Rs. 92 crores worth of hard currencies, equivalent of 275 million dollars. During the quarter April to June, 1947, we have had a net deficit on hard currency account of Rs. 15 crores. It will be observed, therefore, that since the financial year 1946-47 we have been consistently drawing on the pool for our dollar requirements and that we are at present in heavy deficit with the United States and other hard currency countries.

Another fund known as the Post-War Dollar Fund was also created with a contribution of 20 million dollars for 1944. The U.K. Government agreed in 1943-44 to place at the disposal of India 20 million dollars in a separate fund to be utilised after the end of the hostilities with Japan for restocking and capital expenditure. This was done in view of our large contributions to the Empire Dollar Pool and our willingness to render aid to the United States. It was agreed that India will not demand further allotments from the Dollar Pool before the allotted fund was exhausted. As this figure of 20 million dollars was a percentage of our dollar earnings on trade account during 1944, the U.K. Government agreed to credit the fund further with a similar sum not exceeding 20 million dollars for 1945, if our dollar earnings were maintained at the same level. Accordingly, an allocation of 20 million dollars was made. It should be pointed out that our purchases were not limited to the extent of this fund because we were legally entitled to draw on the Empire Dollar Pool for the necessary import of capital goods.

The Anglo-American Loan Agreement provided for the liquidation of the Empire Dollar Pool.

India Joined the International Monetary Fund :—By an Ordinance dated 24th December, 1945, India ratified the Bretton Woods Agreement and joined the International Monetary Fund as an original member and also the International Bank for Reconstruction and Development. India was called upon to pay to the Fund her subscription of $400 million by 1st March, 1947. Gold to the value of 10 per cent of her gold and dollar holdings was transferred to the Fund. Of the rupee subscription a certain amount was credited to the Fund and the balance was paid in non-negotiable and non-interest bearing promissory notes convertible into rupees on demand by crediting the par value to the account of the Fund. The membership involved fundamental changes in India's monetary system with consequential amendments of the Reserve Bank of India Act.

One of the principal objectives of the Fund is to establish a multilateral system of payments regarding current transactions amongst members and eliminate foreign exchange restrictions. The Reserve Bank therefore must be able to maintain multilaterality of exchange transactions between Indian currency and those of member countries. In order to enable the Bank to do so, the Reserve Bank Act has been modified in April, 1947, empowering the Bank to hold other foreign currencies amongst its monetary reserves in addition to sterling. The Bank will thus be able to conserve her multilateral obligations by buying and selling foreign currencies within limits prescribed by the International Monetary Fund.

Originally, the Reserve Bank was obliged to sell sterling at a rate not below 1*s*. 6.3/16*d*., the amounts of sterling to be bought and sold not being lower than £10,000. Members of the International Monetary Fund are obliged to express the par values of their currencies in gold and exchange rates will be determined by the rates which such par values bear to each other. As a member of the Fund, sterling ceases to be the sole determinant of the external value of the rupee. The Act of the Reserve Bank was duly amended in April, 1947, by which the Bank is obliged to buy or sell foreign exchange at rates to be determined by the Central Government from time to time in accordance with its

obligations to the Fund, provided the amount of foreign exchange to be bought or sold shall in each case be of a value not below Rs. 2 lakhs. The maximum buying and minimum selling rates for sterling have been refixed at 1*s.* 6.9/64*d.* and 1*s.* 5.55/64*d.* respectively, in order to comply with the provision of the International Monetary Fund that the maximum and minimum rates for exchange transactions amongst member countries' currencies shall not differ in the case of spot transactions by more than 1 per cent. The rupee has therefore been delinked from sterling and is linked to currencies of all countries which are members of the Fund. Rupee emerged henceforward as an independent currency. In view of India's large sterling balances the Reserve Bank will have to deal in sterling and will be unable to give effect to multilateral convertibility. India has decided to exercise exchange controls under the provisions of the Fund during the transition period.

The Foreign Exchange Regulation Act of 1947 aims at conserving India's foreign exchange resources for development purposes. Although the International Monetary Fund desires exchange stability and elimination of restrictions on trade it provides for that member countries should have powers to impose exchange controls to regulate movement of capital of their residents. The above Act restricts the freedom of transfer between India and other sterling area countries except with the previous permission of the Reserve Bank, which has, however, been authorised to exclude specified currencies and the Reserve Bank has issued notifications, permitting payments to or for the credit of or on behalf of persons resident in countries, belonging to the so-called sterling area.

By an amendment of the Reserve Bank Act in 1947, the Bank has also been authorised to buy and sell securities issued by the Government of any country outside India, provided it is also a member of the International Monetary Fund.

After joining the Fund, India indicated her willingness to maintain the value of the rupee at 1*s.* 6*d.*, reserving her right to change the same and to adopt a monetary system best suited to her at the appropriate time.

The Present Indian Currency System :—The rupee remains an unlimited legal tender and inconvertible into gold since

September, 1931. After joining the International Monetary Fund, the rupee has been awarded a fixed gold value and is also multilaterally convertible. Owing to India's large sterling balances, the rupee has to maintain a close link with sterling for all practical purposes at the rate of 1*s.* 6*d.*, although in theory it has been delinked from sterling and made a free currency.

The total currency issue expanded enormously since World War II and stands now at 12,11,12,61,000 against the backing of foreign securities to the extent of Rs. 7,10,34,38,000 and of Government of India Rupee securities 4,13,72,23,000.

The gold reserve of the Reserve Bank remains unchanged at Rs. 40,01,71,000.

The old full-weight rupee has been replaced by rupees of a lower degree of fineness. The present currency circulation consists of these rupees in addition to one-rupee notes and Reserve Bank notes. Subsidiary and token coins of smaller denominations than a rupee also circulate.

If the present monetary system of India is to be styled as such it is actually a managed currency system for all practical purposes.

Indian Paper Currency :—The Acts of 1808, 1840 and 1843 authorised the Presidency Banks of Bengal, Bombay and Madras to issue notes payable to bearer on demand under certain restrictions, regarding both issue and reserves. Subsequently the Government proposed to cancel this right of banks and undertake note issue themselves and separated the functions of note issue from banking. The Paper Currency Act of 1861 was passed dividing India into three circles of issue with headquarters at Calcutta, Bombay and Madras. These circles were increased to seven in 1910 and included Rangoon, Karachi, Cawnpore and Lahore. Notes of Rs. 10, 20, 50, 100, 500, 1,000 and 10,000 were issued. A five-rupee note was introduced in 1891. These notes were issued without limit to the public in exchange for rupees, British gold coins or gold bullion on the requisition of the Controller of Currency. They were declared unlimited legal tender within their circles of issue and were encashable only at the head office of the circle of issue, although Government Treasuries cashed notes of other circles for bona-fide travellers and Railway companies. In order to guarantee the convertibility

of these notes, a reserve was formed in bullion and coin up to the full value of notes issued, except a limited portion, which was covered against Government of India Rupee Securities.

As the circle system of issue was unpopular and impeded expansion of the note issue, it was abolished, introducing the universalisation of notes by gradual stages. Five-rupee notes were universalised in 1909, Rs. 10 and Rs. 50 in 1910, Rs. 100 in 1911 and Rs. 500 and Rs. 1,000 in 1931-32. Extra-legal facilities for encashment were provided by Government Treasuries and Presidency Banks, excepting during World War I.

The Act of 1861 provided for a fixed maximum fiduciary issue in the form of India Government securities up to a limit of Rs. 4 crores in 1861, which was raised to Rs. 6 crores in 1871, 8 crores in 1890, 10 crores in 1897, 12 crores in 1905 and 14 crores in 1911. The Act of 1905 authorised the holding of sterling securities up to Rs. 2 crores, which was increased to Rs. 4 crores in 1911. The entire Paper Currency Reserve except the fiduciary portion was held in silver coins in India up to 1898. In 1898, the Gold Note Act authorised the Government to hold any part of the metallic portion of the reserve in gold coin. The Act of 1900 gave authority to hold part of this gold coin in London. The Act of 1905 authorised the Government to hold the metallic portion of the reserve, or any part of it, either in London or in India, and in gold coin or bullion, or in rupees or silver bullion, with the provision that all coined rupees were to be held in India only.

With the gradual expansion of the note issue, the metallic reserve portion became unduly large and uneconomic. A good part of it was kept in London and utilised to support the rupee exchange.

By limiting the fiduciary issue to a statutory limit, the system was made inelastic and since the other part was issued against metallic reserves, it was highly expensive.

The total note issue rose from Rs. 7,63,00,000 in 1862-71 to Rs. 66,12,00,000 in 1914.

Effects of World War I on the Indian Paper Currency :— Immediately after the war, there was a great demand for encashment of notes and people lacked confidence. This soon died away and the paper currency was expanded considerably to

meet increased demands. As metallic reserves could not be available, the fiduciary portion was gradually stepped up by several Acts and Ordinances, as illustrated from the following table:—

IN CRORES OF RUPEES

Acts		Permanent investments	Permissible temporary investments	Total
Act VII of 1911 (Pre-war)	...	14	...	14
Act V of 1915 ...	...	14	6	20
Act IX of 1916 ..	...	14	12	26
Act XI of 1917 ...	...	14	36	50
Act XIX of 1917	...	14	48	62
Act V of 1918 ...	...	14	72	86
Act II of 1919 ...	...	14	86	100
Act XXVI of 1919	...	20	100	120

A good portion of the reserve was also invested in British and Indian Treasury Bills.

Notes of Re. 1 and Rs. 2-8 were also issued. There was a crisis in the note issue after 1918, when people lost confidence and notes were encashed at a discount. Confidence was gradually revived by importing 200 million ounces of silver from America under the Pittman Act.

By a temporary Amendment of the Paper Currency Act in September, 1919, the invested portion of the Paper Currency Reserve was raised to Rs. 120 crores, out of which Rs. 100 crores would have to be invested in British Treasury Bills. In March, 1920, a temporary Act was passed, authorising the investments to cover either rupee or sterling securities. This was necessary in order to meet increased demands for remittances to London. Then the Indian Paper Currency Amendment Act was passed in October, 1920. It contained Permanent and Temporary provisions. Under the first head, it was provided that the metallic reserve was to be at least 50 per cent of the total reserve. Excepting Rs. 20 crores worth of securities held in India, the remainder was to be

held in England in short-term securities not exceeding a period of 12 months. The Controller of Currency was authorised to issue notes up to an amount of Rs. 5 crores against inland discounted bills of exchange maturing within 90 days of their issue. This extra issue was to take the form of a loan to the Imperial Bank which was to pay 8 per cent interest to the Government and deposit accepted bills of exchange with the latter. (The limit of 5 crores was raised to 12 crores by the Indian Paper Currency Amendment Act of 1923). The provision regarding the fifty per cent statutory metallic reserve was irrespective of this extra issue, which was not to be considered for the purpose of fixing the metallic reserve. The Secretary of State was not to hold more than five million pounds in gold bullion in London. Regarding temporary provisions, the gold and the sterling securities held in the Paper Currency Reserve, which since 1920 had been valued at Rs. 10 to the sovereign, were revalued at the rate of Rs. 13-13 to the sovereign in accordance with the provisions of the Indian Currency Act, 1927, which came into force on that date. This resulted in an increase of Rs. 930 lakhs in the holding of gold and sterling securities, which was offset by cancelling the same amount of Indian Treasury Bills, the holding of which was reduced from Rs. 49·77 lakhs to Rs. 40·47 lakhs.

The Currency Act of 1927 :—The Hilton-Young Commission recommended that there should be no obligation on the part of the currency issuing authority to convert notes into rupees, as notes would be convertible into gold bullion under a gold bullion standard. This rule would apply to new notes and not to old notes.

The Commission also emphasised the desirability of converting all notes into rupees, if required by the public. The Commission also recommended the printing of one-rupee notes, which would be recognised as full legal tender and not legally convertible into rupee coins. It would be a statutory obligation on the currency authority to convert all notes except one-rupee notes into notes of smaller denominations or rupees at the option of the said authority.

The Commission also recommended the unification of the Paper Currency and Gold Standard reserves. The Commission favoured the proportional reserve system instead of the prevailing

fixed fiduciary reserve system. The minimum reserve in gold and gold securities was laid down at 40 per cent, although the currency authority should try to maintain a reserve ratio of 50 to 60 per cent. The gold holding should be 20 per cent as soon as possible and 25 per cent within ten years. The Government was asked to fortify the gold reserves at an early date. The silver reserves should be reduced over a period of ten years from Rs. 85 crores to Rs. 25 crores. The remainder of the Reserve was to be kept in the shape of self-liquidating trade bills and Government of India securities. The amount of the securities was not to exceed the quantity of notes which was not likely to be withdrawn from circulation *plus* such quantities, the sale of which would not disturb the Government's credit.

The Currency Act of 1927 made Indian notes convertible into gold bar or sterling at the option of the Government, provided a fixed minimum quantity of notes was offered. The crisis of September, 1931, however, removed the gold parity of the rupee and as such currency notes ceased to be convertible into gold. Henceforward notes were legally convertible into sterling, subject to certain restrictions. The establishment of the Reserve Bank of India in April, 1935, did not make mentionable alterations in this respect, although the Reserve Bank was required to convert all notes into rupees, pending the adoption of a more permanent monetary standard. The Reserve Bank has been able to unify the Paper Currency and Gold Standard reserves.

The following table illustrates the growth of average gross and active circulation of paper currency between 1904-5 and 1936-7:—

In crores of rupees.

Year	Gross	Active	Year	Gross	Active
1904-5	39·2	28·1	1929-30	183·1	163·0
1909-10	49·6	37·2	1931-2	163·6	152·6
1913-14	65·5	46·6	1933-4	178·1	157·4
1914-15	64·0	45·4	1935-6	192·2	163·0
1917-18	101·7	71·8	1936-7	202·0	176·0
1919-20	171·6	151·1	1937-8	211·8	186·1
1923-4	179·0	156·9	1938-9	210·6	182·3
1927-8	180·1	162·6	1939-40	227·7	208·9

The present position of Indian currency is illustrated by the following table:—

ISSUE DEPARTMENT, RESERVE BANK OF INDIA (*In Lakhs of Rs.*)

	Notes in circulation.	Notes held in Banking Department.	Total Notes issued.	Gold Coin and Bullion.	Foreign Securities.	Rupee Coin.	Rupee Securities.
1938-39	182,36 (7,97)	28,28 (1)	210,64 (7,98)	44,42	66,95	67,11	32,16
1941-47	1,222,96	32,61	1,255,57	44,42	1,333,88	19,43	57,84
1947-48	1,227,82	47,12	1,274,95	44,42	1,135,32	32,36	62,84
1948-49	1,231,84 (5,58)	22,02 (–)	1,253,86 (5,58)	42,49	907,47	42,96 (90)	265,62

Note:—Pakistan notes and rupee coin are shown within brackets below those of India from April, 1948 (when they were first issued) to June, 1948, *i.e.*, up to the establishment of the State Bank of Pakistan.

CHAPTER XX

BANKING AND CREDIT

Introduction :—The Indian Money market and the Banking System consists of the following constituents, namely, the Reserve Bank of India, the Imperial Bank of India, Exchange Banks, Joint-Stock Banks, Co-operative Banks, Finance Corporations, the numerous and heterogeneous group of indigenous bankers, money-lenders and brokers. In addition, there are Land Mortgage Banks, Postal Savings Banks and Stock Exchanges.

Indigenous Bankers :—Indian banking is very old and the Arthashastra of Chanakya described the powerful guilds of merchant bankers, who received deposits and advanced loans like modern banks. These indigenous bankers received a set-back after Muslim invasion of the country, bringing in a general sense of insecurity. In older days, these bankers were associated with Royal Courts, they financed the State and even collected revenues of the Government. They wielded a big influence on East India Company by financing the same until the growth of the European Agency Houses. They were affected towards the end of the eighteenth century by the growth of joint-stock banks and by the introduction of a uniform currency because they used to change money, especially when various coins were issued by numerous states.

The indigenous banking system plays an extremely useful role in India's economy. Indigenous bankers are found throughout the country, being distributed in villages and towns. As a matter of fact, the large part of rural credit lies entirely within their orbit of operations. The Chetties of Madras and Shroffs in other parts of the country do a large amount of banking business. It is estimated that a considerable part of total credits in India is handled by these bankers.

Although some of them are now converting themselves into private banking houses on modern lines, the majority of them is still carrying on their trade on traditional lines. The responsibility of these bankers is unlimited and single or joint in case of partnership or joint-family. Though they take deposits, which are payable

in cash only and not by cheques, the large part of their capital is derived from their own purses. Normally, they combine the business of finance with trade and commerce. They are even to-day the principal agencies for rural credit and trade. They issue letters of credit and discount hundies, which are analogous to inland bills of exchange. They form important links between the Indian Money Market and the trading community. They buy Government Treasury bills, which are discounted with joint-stock banks in case of necessity for funds.

As the indigenous bankers control a considerably large part of India's total credit and contribute substantially to the banking requirements of the country, it is necessary to co-ordinate these banks in order to control effectively the credit of the country and mobilise the capital resources to maximum benefits. The Reserve Bank of India as a central banking institution can never expect to control effectively the credit and currency of the country before bringing within its orbit these numerous indigenous banks. The Central Banking Enquiry Committee therefore recommended that early steps should be taken to link these institutions to the Reserve Bank of India by reforming their methods of business on modern banking lines, instituting a system of audit and affording them in exchange all facilities of rediscount and remittance.

A statutory obligation was placed on the Reserve Bank by the Reserve Bank of India Act, 1934, to present a "report at the earliest practicable date and in any case within three years to the Governor-General-in-Council with proposals, if it thinks fit, for legislation on the extension of the provisions of this Act relating to scheduled banks to persons and firms not being scheduled banks engaged in British India in the business of banking." The Reserve Bank accordingly addressed a circular letter to all scheduled banks and representative indigenous bankers on 6th May, 1937 in order to elicit their opinions on the possibilities of linking the indigenous bankers with the Reserve Bank. As they were numerous and because of the highly personal and fluid character of their business, the Reserve Bank proposed to deal with the shroffs through some intermediate agency, *e.g.*, scheduled banks, which would share the financial responsibility and undertake the detailed examination which was necessary if credit was to be accorded. Under this provisional

scheme the shroffs were to get their bills and notes discounted with the scheduled banks, which in their turn were to be enabled to get these documents rediscounted with the Reserve Bank. The Reserve Bank also indicated the conditions under which it was prepared to establish a direct link. This provisional scheme provoked severe protests and Sir James Taylor, Governor of the Reserve Bank, issued a second draft scheme on 26th August, 1937, for the purpose of directly linking the private bankers. The Reserve Bank suggested that if the indigenous bankers were to come into practical relationship with the Reserve Bank, they would have to formalize their methods of banking on lines approximating to joint-stock banks and in particular develop the deposit side of banking activities. Indigenous bankers with capital of at least Rs. 2 lakhs to be raised to Rs. 5 lakhs at the end of five years, would be entitled to apply for registration in the books of the Reserve Bank as private bankers. They must wind up their non-banking business within a reasonable time. They would not have to furnish compulsory deposits unless their time and demand liabilities were five times and more in excess of their capital in the business. They must maintain proper books of accounts and have them audited by registered accountants. They must file with the Reserve Bank periodical statements of their affairs and must also publish the returns prescribed for banking companies. Indigenous bankers after satisfying these conditions would have the privilege of direct rediscount with the Reserve Bank against eligible paper, the right to secure advances against Government Paper, and same remittance facilities as are allowed to scheduled banks. The Reserve Bank therefore informed the Government of India that it could not recommend any immediate legislation to amend the Reserve Bank Act regarding the extension of its provisions relating to scheduled banks to the private bankers. It was however stressed that as mentioned in the Bank's Statutory Report on Agricultural Credit (issued in December, 1937) the offer made in its letter of 26th August, 1937 remained open and the Bank would be prepared to take the matter up with the Government in order to amend the Act, if the indigenous bankers were prepared to conform to its conditions or suggest any other practical alternative. Meanwhile, the Reserve Bank was considering whether it would be possible to develop open-market operations in trade bills as this would

give first-class indigenous bankers closer relationship without the necessity of introducing any radical change in their prevailing business methods.

Growth of Modern Banking Systems :—The European system of banking in India started with Agency Houses, which combined banking and business, but they indulged in speculative risks and courted failures following the commercial crisis of 1829-32. Messrs. Alexander & Co. established the first type of a European Bank in the name of the Bank of Hindostan in Calcutta, but this failed in 1829-32. The Union Bank was then created by co-operative efforts among the mercantile houses of Calcutta and this also closed its doors in 1848. By this time the necessity of a modern banking system was keenly felt owing to the expansion of India's foreign trade and the necessity of the Government to have a bank for itself. Accordingly, the Bank of Calcutta, the first Presidency Bank, was established in 1806, by a charter of the East India Company with a capital of Rs. 50 lakhs, out of which Rs. 10 lakhs were subscribed to by the East India Company. The first Bank of Bombay was started in 1840 with a capital of Rs. 52 lakhs, the Government taking shares worth Rs. 3 lakhs. This bank was liquidated in 1868, following its participation in speculation due to the American civil war and cotton famine. Another bank was started in Bombay in the same year with a capital of Rs. 1 crore. The Bank of Madras was instituted in 1843 with a capital of Rs. 30 lakhs, Rs. 3 lakhs being contributed to by the East India Company.

The three Presidency Banks acted as bankers to the Government, who not only contributed to their share capital, but also had a share in their control by appointing directors. The note issuing powers of these banks were strictly limited and were completely withdrawn from 1868, when the Government assumed the monopoly of the note issue.

The Presidency Banks Act of 1876 was passed under which the Government withdrew their capital and divested itself of all controls regarding the internal management of these banks. At the same time, the Government retained the powers of auditing and inspecting these banks and made it obligatory for them to publish weekly statements of accounts. This was done to ensure the development of these institutions on sound lines. These banks

enjoyed the advantage of being bankers to the Government, managing the public debt of India and holding a substantial part of Government balances.

Up to 1876, the entire Government balances at headquarters were kept with these banks, but the Government established their own Treasuries known as Reserve Treasuries at Calcutta, Bombay and Madras in 1876. Henceforth Government balances were largely kept in these Treasuries and a small amount was placed in Mofussil Treasuries. The Government agreed in 1876 to pay interest to the banks on the difference between the actual deposits and the minima fixed, in case the former fell short of the latter, but they gave no undertaking to keep any balances whatsoever with the banks. During the World War of 1914-18 the Government placed large funds—much in excess of the minima—at the disposal of the Presidency Banks in order to facilitate the investment by the public in War Loans. The Reserve Treasury system was abolished in 1921, and the Government balances over and above those in the district and sub-treasuries were kept with the Imperial Bank at its head offices and its branches until the establishment of the Reserve Bank in 1935, when they were handed over to that bank. The banks were excluded from dealing in foreign exchange. They were also prohibited from borrowing money abroad and there were certain restrictions as to the amount of the advances and the period for which they were made, as well as the securities against which they could be made. Although loans were arranged to be given from Treasury balances to the banks in 1898, no such facility was availed of owing to rigid conditions laid down for such loans.

The activities of the Presidency Banks were defined and limited. They could receive deposits and invest in Government and other specified securities of public bodies and corporations. They were allowed to draw and discount bills of exchange payable in India. They could advance funds against accepted bills of exchange and promissory notes, accept securities for safe custody, and buy and sell gold and silver and manage Government loans at the Presidency towns and the debt business of certain municipalities.

The association of the Presidency Banks with the Government gave them a stamp of security and stability. They made phenomenal progress from year to year.

The Imperial Bank of India :—The passing of the Imperial Bank of India Act in September, 1920, constituting the Imperial Bank of India from 27th January, 1921 by amalgamating the three Presidency Banks satisfied partly the desire of India to have a central bank. The idea of a central banking institution is more than a century old. In 1836, a body of merchants pressed the East India Company to establish a central bank in India. J. M. Keynes, a member of the Chamberlain Commission, prepared an elaborate scheme for a central bank in co-operation with Sir Earnest Cable. The Imperial Bank Act was based on this scheme. The demand for a central bank gathered momentum from 1918. It was pointed out that the Indian currency system was inelastic, because the note issue was controlled by the Government, while banks regulated credit by maintaining their own reserves. This led to dissipation of banking resources. In order to obtain financial stability, it was necessary to have a central bank, which could co-ordinate the banking systems of the country and effectively control credit by unifying the management of currency and banking into a central institution.

The Imperial Bank was constituted by the amalgamation of the three Presidency Banks, which were taken over as going concerns with all their assets and liabilities. It was laid down that the Central Board was to meet at least once a year at every local Head Office. The capital of the Bank was fixed at Rs. 15 crores, including reserves. Although it was a private bank, it was controlled by the Government within limits.

The control of the Imperial Bank was entrusted to a Central Board of Governors with local boards at Calcutta, Bombay and Madras. Two Managing Governors were appointed by the Governor-General-in-Council on the recommendation of the Central Board. The same authority nominated the Controller of Currency on the Central Board to be the guardian of the financial interests of the Government. The Governor-General-in-Council was empowered to issue instructions to the bank regarding any matter which in his opinion vitally affected the financial policy or the safety of the Government balances. The duties of the Central Board were to deal with matters of general policy, to exercise general powers of control over the local boards, to determine the distribution of funds and the fixation of the bank rate and to be responsible for the weekly publication of the

bank's accounts. The local boards on the other hand dealt with the ordinary day-to-day business in their respective territories. The bank was also allowed by the Act to establish a London office. It was not, however, allowed to deal directly with the public in foreign exchange, though it might transact business in London on behalf of the Indian Government including the Secretary of State, public bodies, other banks and the old customers of the Presidency Banks.

The following functions were allowed to the bank: investments in certain specified securities of the Government of India and United Kingdom, Port Trust Bonds, certain Municipal Corporation Bonds and those of State-aid railways and of District Boards, advancing money against any of the above securities, advancing money against accepted bills of exchange and promissory notes, against goods or documents of title thereto deposited with or assigned to the bank, drawing, accepting, discounting and selling bills of exchange and other negotiable securities payable in India or Ceylon and subject to the direction of the Governor-General-in-Council, the discounting, buying and selling of bills of exchange payable outside India for, from or to such banks as may be approved. The bank was permitted to draw bills of exchange and grant letters of credit for the use of parties whose estates were being administered by the bank and also for private constituents or customers for bona fide personal needs. It was allowed to borrow funds in India and receive deposits, receive securities for safe custody and collect interest thereupon, buy and sell gold and silver, etc. The London office of the bank was allowed to borrow money in England for the purpose of the Bank's business upon the security of the bank's assets, but was not to open cash credits, keep cash accounts or receive deposits in London except from the former customers of the Presidency Banks. The Act provided for an agreement between the bank and the Secretary of State for India to last for ten years, being terminable thereafter after one year's notice. The bank undertook all the general banking business of the India Government and accepted payments and made disbursements for the Government. It held all the treasury balances at headquarters and at its branches. It managed the public debt in exchange for a specified remuneration. The bank was required to undertake to open 100 new branches, of which the Government

of India might determine the location of one in four. It was expected to give the public every facility for the transfer of money between its branches at reasonable rates approved by the Controller of Currency. The Government were to cease remittance of funds for the public between any two places where the Imperial Bank had business. The London office of the bank, which was started in January, 1921, took over a portion of the business of the Government of India which was previously done by the Bank of England, *e.g.*, the current account of the High Commissioner for India.

Restrictions were placed on dealing in foreign exchange and raising funds in London. Loans or advances upon mortgage or otherwise, upon the primary security of immovable property, or the documents of title relating thereto, were expressly prohibited, but allowed against such a collateral (secondary) security if the main security was of the type noted. Loans or advances could not be made on the security of its own stock or shares. The amount which might be advanced to any individual or partnership or firm by way of discount or on any personal security was limited under by-laws sanctioned by the Government. Loans or advances could not be granted for a longer period than six months. Discounts could not be made, or advances on personal security given, unless such discounts or advances carried with them the several responsibilities of at least two persons or firms unconnected with each other in general partnership.

With the establishment of the Reserve Bank of India, the Imperial Bank of India Act III of 1934 was also passed introducing the following important changes.

The Central Board consists of the following directors: (*a*) Presidents and Vice-Presidents of the Local Boards established by the Act; (*b*) one person elected from among themselves by the members of each Local Board established by the Act; (*c*) a Managing Director to be appointed by the Central Board for five years, who may be retained by the Board for further periods not exceeding five years; (*d*) such number of persons not exceeding two and not being officers of the Government as may be nominated by the Governor-General-in-Council; (*e*) a deputy Managing Director to be appointed by the Central Board; (*f*) Secretaries of the Local Boards; (*g*) such number of persons to

represent any Local Board established hereafter under the Act as the Central Board may prescribe. The Directors specified in (*e*) and (*f*) are not entitled to vote at the meetings of the Central Board. The Deputy Managing Director is entitled to vote in the absence of the Managing Director. The Governor-General-in-Council is to nominate an officer of the Government to attend meetings of the Central Board, who is not, however, entitled to vote. Under the new Act, the Controller of Currency ceased to be an ex-officio member of the Board, and the number of persons nominated by the Governor-General was reduced to two. So also the Managing Director is to be directly appointed by the Board. The Act thereby diminished the control of the Government in the working of the bank.

The Imperial Bank of India, which ceases to be banker to the Government is authorised to enter into an agreement with the Reserve Bank of India to conduct Government business as the sole agent of the Reserve Bank.

The old limitations imposed on the business of the London office of the bank have been removed. The bank is enabled to establish branches or agencies in India and foreign countries.

The Central Board is authorised to establish Local Boards without the previous sanction of the Governor-General. Similarly the bank is authorised to increase its capital without such sanction. The bank is now freed from the power of the Governor-General to issue instructions to it regarding matters affecting Government's financial policy or the safety of the Government balances.

The bank is now authorised to buy bills of exchange payable outside India, to borrow money out of India and to transact foreign exchange business. The period of advances and loans relating to the financing of seasonal agricultural operations is extended from six to nine months. The bank is authorised to acquire and hold and generally deal with, any right, title or interest in any property movable or immovable which may be the bank's security for any loan or advance or may be connected with such security. The bank is further entitled to advance and lend money and open cash credits on the security of shares of the Reserve Bank, debentures or other securities for money issued under the authority of a municipal board or committee, or with

the sanction of the Governor-General, on the debentures or other securities for money issued under the authority of a Ruling Prince or Chief, or on debentures of companies with limited liability subject to directions issued by the Central Board. The bank is empowered to give advances and open cash credits against goods which are hypothecated to the bank as security for such advances, loans or credits, if so authorised by special directions of the Central Board.

Some of the old restrictions *e.g.*, restrictions on land mortgage business, or on the period of the advances and loans, on the amount of the loans to individual borrowers, prohibition of loans on the security of the shares of the bank etc., continue to operate. The Bank has established a foreign exchange department and is endeavouring to expand its foreign exchange busness. It possesses special advantages in this respect, due to its London branch, numerous branches in India, extensive business connections and large financial resources.

Owing to its special privilege of being a banker to the Government, which was also associated in the management of the bank, the Imperial Bank commanded a unique position in the financial world. Even after the institution of the Reserve Bank, it was made the sole agent of the Reserve Bank. The Bank made phenomenal progress and is held high in the esteem of the people owing to its sound management and high integrity. That the bank is actively contributing to the financing of India's trade and industry is illustrated by its balance sheet for the week ended 27th May, 1949, an extract of which is given below.

The Imperial Bank has contributed largely to the banking development of India by opening a network of branches throughout the country. It also assisted greatly in organising the Indian money market by acting its leader and offering facilities for rediscount. In spite of its solid work, the Bank has become the target of criticism from a section of the Indian public. It is alleged that the Bank's management being in non-Indian hands, it has followed a discriminatory policy, detrimental to India's interests. Indian business and other banks have not received a square deal. The Bank has failed to afford proper facilities for training Indians in banking technique, although it employs a large number of Indians in its superior services. Recently an agitation

STATEMENT OF THE AFFAIRS OF THE IMPERIAL BANK OF INDIA ON THE 27TH MAY, 1949

LIABILITIES	Rs.	Rs.
CAPITAL:—		
Authorised—2,25,000 shares of Rs. 500 each	11,25,00,000	
Issued and Subscribed—2,25,000 shares of Rs. 500 each ...	11,25,00,000	
Called up—		
75,000 shares of Rs. 500 each, fully paid	3,75,00,000	
1,50,000 shares of Rs. 500 each, Rs. 125 paid	1,87,50,000	
		5,62,50,000
Reserve Liability of Shareholders —Rs. 375 per share on 1,50,000 shares	5,62,50,000	
Reserve Fund	...	6,27,50,000
Fixed Deposit, Savings Bank, Current and other Accounts	...	2,64,10,23,000
Loans against Securities per contra	...	...
Acceptances for Constituents ...	...	...
Sundries	...	2,45,32,000
TOTAL Rs. ...		2,78,45,55,000

ASSETS	Rs.	Rs.
INVESTMENTS:—		
Government Securities ...	90,07,83,000	
Other Authorised Investments	9,50,96,000	
		99,58,79,000
ADVANCES:—		
Loans	32,64,81,000	
Cash Credits and Overdrafts ...	87,86,99,000	
Bills Discounted and Purchased	6,42,49,000	
		1,26,94,29,000
Liability of Constituents for Acceptances per contra ...		...
Dead Stock		1,58,30,000
Sundries		2,03,93,000
Bullion		...
CASH:—		
In hand and with the Reserve Bank of India	34,75,61,000	
Balances with other Banks ...	13,54,63,000	
		48,30,24,000
TOTAL Rs. ...		2,78,45,55,000

was made for nationalising the Imperial Bank, but the Government has discreetly refused to do so. Instead of applying the dubious remedy of nationalisation, the Government has wisely adopted the right course of amending in future the Imperial Bank of India Act in such a way that the institution may continue to serve the monetary interests of India free from any criticism.

Although the Imperial Bank performed till the inception of the Reserve Bank of India certain functions of a central bank, namely, banker to the Government and management of the public debt of India, banker to other banks to a certain extent by providing rediscount facilities and management of the Clearing Houses, it was essentially a commercial bank. The note-issuing authority also vested in the Government. At present, it is functioning as a pure commercial bank within the limits of the Imperial Bank of India Amendment Act of 1934.

Exchange Banks :—The Presidency Banks were prohibited from doing business in foreign exchange and receiving deposits from abroad. The necessity for a special class of bankers doing foreign exchange business arose with the gradual expansion of India's foreign trade.

The Indian joint-stock banks did not handle the foreign exchange business. The Indian Specie Bank established a branch in London to transact mainly in gold and silver. The Alliance Bank of Simla liquidated in 1923, and the Tata Industrial Bank, amalgamated with the Central Bank of India in 1923, also did some foreign exchange business. The first Indian Exchange Bank, namely, the Central Exchange Bank of India, was opened in 1936, under the aegis of the Central Bank of India, but was subsequently amalgamated with Barclay's Bank of London in 1938. Although the Indian joint-stock banks are now undertaking exchange business, it is extremely limited. The Imperial Bank has been gradually expanding its foreign exchange business.

Indian banks have not been able so far to handle exchange business in any worth-while scale due to competition of well-established foreign exchange banks, absence of branches abroad, limited financial resources, lack of technical personnel and having their head offices located in India, because this makes international contacts rather difficult.

In practice, therefore, the foreign exchange business in India lies almost entirely with foreign exchange banks. As England predominated in India's foreign trade and was the leading financial centre of the world the exchange banks originally started in India, were mostly English Exchange Banks with head offices in London. Gradually other foreign banks also established their branches in India to transact foreign exchange business. Amongst the exchange banks operating in India, some are doing considerable business in this country, as for example, the Chartered Bank of India, Australia and China and the Mercantile Bank of India, while others are acting as mere agencies of foreign banks.

Originally the exchange banks financed exclusively India's foreign trade, but now they are also doing substantial ordinary banking business inside the country. Nevertheless the financing of India's foreign trade remains as yet their principal item of business. The import bills are negotiated in England and other foreign centres and are payable in India. But by far the largest proportion of the bills in which the exchange banks deal are export bills drawn by Indian exporters against credits opened with the London banks or finance houses by London importers. These bills, which are drawn usually at three months' sight, are mostly documents on acceptance (D.A.), though a few are documents on payment (D.P.). The D.P. bills are held by the London offices of the exchange banks until they are retired or paid on maturity. The D.A. bills are chiefly discounted or rediscounted immediately after acceptance. They are rediscounted in the United Kingdom by the English and Scotch joint-stock banks or by the Bank of England. In this way the exchange banks receive back in sterling the equivalent of what they pay in rupees in India. They sometimes hold the bills till maturity, in case trade is slack and there is no immediate demand for the employment of funds in India. Thus the export trade of India is chiefly financed by the funds of the British banks. The facility of rediscounting bills in the London money market, where the rate of discount is usually lower than in India, is a great advantage, as the exchange banks buy far more export bills than they can possibly hold till maturity. The lack of this facility in the case of the Indian joint-stock banks renders it extremely difficult for them to compete with the foreign exchange banks.

The purchase of Indian export bills by the exchange banks

means a transfer of their funds to London. To bring their funds back to India, the exchange banks were in the habit of freely purchasing Council Bills and Telegraphic Transfers in London, so long as this system lasted. Now they effect this transfer by selling sterling to the Reserve Bank of India against their London balances. There are other methods also by means of which they increase their funds in India, *e.g.*, by cashing the import bills when they mature, by the sale of drafts, by telegraphic transfers in India for Indian students and travellers abroad and other persons requiring money to be remitted from India. by buying rupee paper in London and selling it in India, etc. If there is a large favourable balance of trade, they sometimes import bars of gold and silver bullion and sovereigns from London, Egypt and Australia. If the balance of payments is against India the exchange banks either send gold or silver out of India. Previously they bought Reverse Councils, if the Government of India made them available. At present, they can purchase sterling drafts from the Bank for delivery in London.

The import trade of India is financed either by sixty days' sight D.P. drafts drawn on Indian importers or by London banks' acceptance of 'House paper'. The former method is usually practised in the case of imports by Indians. These drafts, after being discounted by the exchange banks in London, are presented before the importers for acceptance and payment. Importers may, however, obtain delivery of the goods before payment by executing trust receipts in favour of the exchange banks and holding the goods as their trustees until final payment. The second method is available to European importing firms who have London houses of repute. The latter draw bills on the London offices of the exchange banks which undertake to accept these bills and thereafter they can be readily discounted in the London money market. The accepting banks in London forward the relative documents to their branches in India for the collection of the proceeds of the goods in India and these are sent to London before the bills mature or when they are paid. A more active part is therefore played by the head offices and branches of the exchange banks outside India in the financing of India's import trade. The share of the Indian branches in the business consists of collecting the import bills on maturity. The import bills, unlike the export bills, are usually not rediscounted in

India, and the import trade is thus financed to a larger extent than the export trade by the funds of the exchange banks. It is necessary to initiate the practice of drawing these import bills in rupees and they should be preferably D.A. bills in order to develop a discount market for import bills.

It was argued that foreign exchange banks being controlled by non-Indians worked to the detriment of Indian nationals and accorded preferential treatment to foreigners. The Central Banking Enquiry Committee, in consequence recommended that since provision exists in the laws of various countries for regulating foreign banks by means of licenses granted by some prescribed authority in the country, advocated the introduction of a similar system into India in the interests of depositors, for ensuring the grant of reciprocal treatment in foreign countries to Indian banks and for giving Reserve Bank some control over the banks operating in this country. The Reserve Bank would be the most suitable authority for undertaking the task of scrutinizing applications from non-Indian banks and for granting licenses in approved cases. The Committee however held that, in fairness to the banks already established, licenses should be freely granted to them. Every license should be in force for a stated period and should be renewed if the licensing authority is satisfied that the provision of the Indian law applicable to the bank and other conditions specified in the license are complied with. License should be granted on the following conditions, namely, furnishing the Reserve Bank with annual statements showing the assets and liabilities relating to their Indian business, as prescribed by the Reserve Bank and submitting, at any rate for a few years to come, to the Reserve Bank periodic reports of Indian and non-Indian business handled by them. It also suggested the imposition of other conditions on the basis of reciprocity. There are various restrictions imposed by the laws of foreign countries on non-national banks working there. The power to impose similar conditions in the licenses granted to non-Indian banks in India would enable the Government of India to accord reciprocal treatment to non-Indian banks. Mr. Manu Subedar issued a minute of dissent, stating that the conditions of a license should be that (*i*) The licensed bank should not receive deposits in India from Indian-born persons or joint-stock companies registered in India, (*ii*) The licensed bank should

confine its branches to the port areas only and no branch should be opened in the interior, (*iii*) Controlling interests, directly or indirectly, should not be acquired in Indian institutions in order to defeat the above provisions or for any other motive. The existing branches of the foreign banks in the interior should be withdrawn within five years, (*iv*) Except the manager and one assistant in each branch under him the entire staff should be Indian. He favoured the idea that banking business in India should be exclusively reserved for institutions registered in India.

In order to improve the prospects of Indian nationals in the country's foreign trade, the Central Banking Enquiry Committee recommended that well-established Indian joint-stock banks should open foreign connections useful to their clients. The Imperial Bank should be persuaded to take an active share in the financing of India's foreign trade. If the Imperial Bank failed to finance actively India's foreign trade, the establishment of an Indian exchange bank is recommended. Such a bank should have a capital of Rs. 3 crores subscribed in the first instance by joint-stock banks registered in India. If the share capital is not fully subscribed within a prescribed time, the balance should be supplied by the Government, which should arrange gradually to dispose of their holding later to the general public. As long as the Government hold more than 50 per cent. of the capital, they should have a predominating voice in the appointment of the directors. The question of entrusting the work connected with Government remittances to a department of the new bank working under the control of the Reserve Bank should be considered in consultation with the Reserve Bank subject to the stipulation that the new bank shall not be allowed to make a profit on such remittances purchased in the open market in its capacity as agent.

As the exchange banks are now scheduled to the Reserve Bank of India, they may be persuaded to conduct their business free from past criticism. The following table illustrates the present position of exchange banks in India:—

CAPITAL, RESERVES, DEPOSITS AND CASH BALANCES OF THE EXCHANGE BANKS

As on	Number of Banks	Capital and Reserves			Deposits		Cash Balances	
		Paid-up Capital	Reserves	Total	Out of India	In India	Out of India	In India
		(£1,000)	(£1,000)	(£1,000)	(£1,000)	(Rs. 1,000)	(Rs. 1,000)	(£1,000)
31st Dec., 1945 ...	13	54,322	74,054	128,376	2,602,637	1,79,36,41	56,83,17	244,786
" " 1946 ...	13	53,125	76,156	129,281	2,616,234	1,78,30,06	64,35,06	300,894
" " 1947 ...	13	53,145	77,739	130,884	2,772,953	1,78,80,95	70,93,52	308,825

Joint-Stock Banks :—The need for modern joint-stock banks was felt to handle the internal trade and commerce of the country. The progress of commercial banking was slow until 1865, when the principle of limited liability of joint-stock companies was recognised. The financial crisis in Bombay, following the cotton boom of 1865 and the decline in the exchange value of the rupee hampered further progress. The earliest bank was the Bank of Upper India (1863), which was followed by the Allahabad Bank in 1865 and some more banks, one of which was the Alliance Bank of Simla (1874), which went into liquidadation in 1923. In 1870, seven more banks came into existence and the number rose to fourteen in 1894. Most of them were started under European management. The first Indian enterprise was the Oudh Commercial Bank, started in 1881. In 1894 the Punjab National Bank was established, mainly through the efforts of Lalla Harkishen Lal, who was also responsible for the establishment of the People's Bank in 1901. The People's Bank made great strides and at the time of its liquidation in 1913 it had nearly 100 branches and its deposits exceeded Rs. 1¼ crores. A number of new floatations were made, following the Swadeshi movement of 1905, especially in western India, United Provinces and the Punjab. The Bank of India, the Indian Specie Bank, the Central Bank of India, the India Bank (Madras), the Punjab and Sind Bank, the Bank of Mysore, the Bank of Baroda and the Bombay Banking Company were started during this period. The failure of the People's Bank on 20th September, 1913 was followed by numerous other failures, including that of the Specie Bank in November, 1913 and as many as fifty-five banks went into liquidation during 1913-14. The boom during and after the war of 1914-18 imparted impetus to new floatations, but when the depression set in, a large number of failures took place. Eleven banks failed in 1915, thirteen in 1916 and sixteen in 1918. The years 1913-24 were a critical period for joint-stock banking in India. As many as 161 banks failed during this period and the paid-up capital of these banks amounted to about Rs. 6¾ crores. Notable amongst them was the Alliance Bank of Simla in 1923, which had far-reaching and disastrous consequences. The outstanding case of bank failure during recent years was that of the Travancore National and Quilon Bank, which went into liquida-

tion in 1938. The closure of this bank, which was a scheduled bank caused a banking crisis in South India.

Although the development of banking was rapid after the first decade of this century, the progress was marred by several bank failures. Among others, the main causes of bank failures were small cash reserves in relation to total deposits, high rates of interest offered to attract deposits, lack of balance in the authorised, subscribed and paid-up capital, negligence of directors, absence of technical personnel, fraudulent practices, the gullibility of depositors who were easily misled by the window-dressing of balance sheets and the payment of dividends out of capital, lack of inter-bank co-operation, absence of a co-ordinating agency in the form of a central bank and want of assistance from Government or semi-Government institutions.

In spite of several legislative attempts to reform banking in India, many of the dangers which threaten a banking crisis continue to persist. Recently, many Bengali banks including a few scheduled ones came to grief. Fifty-seven banks closed or suspended operations in 1948. Out of these about half went into liquidation or declared moratorium. Although the Banking Act of 1949 aims at making the Reserve Bank of India the watch-dog of the Indian banking system by vesting it with wide and discretionary powers, the Reserve Bank should concentrate all attention in producing good bankers, because sound banking can only grow under the initiative of the right type of personnel.

After receiving a set-back in 1913-14, joint-stock banking again revived and expanded until 1923, when the progress was halted. Since then, commercial banking has been forging ahead and during and after World War II, the progress achieved is phenomenal, with only temporary interruptions. The Indian banking system withstood the test of World War II admirably and discharged their functions creditably. Unlike the World War I, there was no tightness in the money market nor did the rates of interest rise. Except from August to October, 1939, when Bank of England temporarily raised the Bank Rate to 4 per cent. from 2 per cent., the Governments of both England and India succeeded admirably in maintaining low and steady interest rates by creating cheap money conditions and expanding the currency according to requirements. Since the cessation of hostilities, the Government of India has been maintaining cheap money condi-

tions with the expansion of the note issue and the Government has declared itself against retreat from this policy. In order to check the inflationary spiral, the Government has wisely chosen to apply mild doses of disinflation as correctives instead of hazarding the risk of a deflation with all concomitant evils of an economic depression and unemployment. During the post-war period capital, deposits, investments, advances, etc., of Indian joint-stock banks recorded sharp increases. Although branches of banks multiplied from 1,471 in 1938 to over 5,266 in 1945, they grew up in a haphazard manner and were unevenly distributed. More often than not, banks opened branches in same places to compete with one another, while a vast area of the country remained untapped by any system of banking institutions. The ratio of cash to total liabilities showed an upward tendency during the post-war period. There has been a fundamental change in the employment of banks' funds. The importance of advances and discounts showed a relatively declining tendency, while banks investments in the Government securities absorbed increasingly large funds, strengthening their liquidity. It has been reported that there were 100 scheduled banks in 1948 with 3,036 officers and 841 non-scheduled banks with 2,611 officers.

It may be observed here that the Indian banking system encountered a severe crisis, following the division of the country on 15th August, 1947 and the Government was obliged to adopt suitable remedies.

The Government of India, promulgated on 20th September, 1947, the Reserve Bank of India (Temporary Amendment) Ordinance, 1947, in order to assist banks in emergencies, following partition. This Ordinance empowered the Reserve Bank to grant emergency advances to scheduled and non-scheduled banks against such forms of securities as it deemed sufficient. The Ordinance lapsed on 20th March, 1948.

Consequent on the partition of the country, a few banks, with registered offices in East Punjab and Delhi, found that while they had most of their assets in West Punjab, almost the entire bulk of their deposit liabilities was transferred to their branches in the Indian Dominion. As a result of this position and particularly because of the difficulties of access to their records and assets in West Punjab, some of these banks found it difficult to make any immediate arrangements to meet their depositors'

demands. To facilitate the smooth working of these banks as well as to alleviate the distress of the depositors who were mostly refugees, the grant of temporary facilities was thought desirable. Consequently on 27th September, 1947, the Government of India, after consulting the Reserve Bank, promulgated the Banking Companies (East Punjab and Delhi) Ordinance, 1947, which empowered the Central Government to postpone for a period of three months the commencement or continuance of all actions and proceedings against a banking company which applied for this concession and whose registered office was located in the province of East Punjab or Delhi.

During the period of moratorium the banks concerned were to make payments to depositors not exceeding in any particular month 10 per cent. of the total of the current and deposit accounts at each branch in India or Rs. 250, whichever was less. Similar payments were also to be made to depositors who could satisfy the bank regarding their deposits in branches outside India. Beyond such payments and normal running expenses the banks concerned were not allowed to dispose of any of their assets or to accept deposits. To enable the banks to meet these demands, the Reserve Bank was empowered to grant necessary advances. The Government of Pakistan also promulgated the Banking Companies (Pakistan) Ordinance, 1947, on 22nd October, 1947. These Ordinances lapsed on 27th March, 1948 and 22nd April, 1948, respectively.

Some banks experienced considerable difficulty early during 1948 in dealing with bills drawn on firms and companies situated in the Punjab and other disturbed areas. In order, therefore, to safeguard their interests, the Government of India, on the recommendations of the Reserve Bank, temporarily amended, on 27th December, 1947, the Negotiable Instruments Act, 1881, and the Indian Limitation Act, 1908, by an Ordinance giving power to treat bills as dishonoured when presentment was impossible due to the prevalence of riots and other disturbances.

The period of limitation was waived where on account of riots or other disturbances a suit could not be instituted in time. The Government of Pakistan issued a similar Ordinance on 13th February, 1948. The Indian Ordinance was allowed to lapse on 27th June, 1948. The Pakistan Ordinance was extended for a further period of three months from 13th May, 1948.

The following tables illustrate the position of joint-stock banks in India and Pakistan:—

SCHEDULED BANKS IN INDIA

(In 000's of Rupees)

	20-5-49	13-5-49	21-5-48
Demand Liabilities	...	...	6,89,05,97
(*a*) Borrowing from Banks ...	30,37,36	33,58,38	
(*b*) Others	5,68,88,57	5,72,53,21	3,12,68,71
Time Liabilities	...	...	...
(*a*) Borrowing from Banks ...	14,00	14,00	...
(*b*) Others	2,81,58,19	2,81,95,17	
Total Cash	36,11,39	36,74,66	38,73,44
Balances with the Reserve Bank ...	60,69,68	54,25,55	93,96,77
Advances	4,76,14,95	4,88,93,80	4,35,10,16
Bills Discounted	17,24,59	17,12,98	16,75,59

Ratio of Cash and Balances with Reserve Bank to Demand and Time Liabilities 11.0 per cent.

Ratio of Advances and Discounts to Demand and Time Liabilities 56.0 per cent.

STATEMENT OF THE POSITION OF THE SCHEDULED BANKS IN PAKISTAN AS AT THE CLOSE OF BUSINESS ON THE 13TH MAY, 1949.

1. Demand Liabilities in Pakistan:—	
(*a*) Borrowings from Banks	85,89,000
(*b*) Other demand liabilities	88,32,36,000
2. Time Liabilities in Pakistan:—	
(*a*) Borrowings from Banks	5,02,000
(*b*) Other time liabilities	18,21,59,000
3. Cash in Pakistan:—	
(*a*) Currency notes of the Government of India and Banks notes	4,69,000
(*b*) Pakistan notes	3,57,76,000
(*c*) India rupee coin	96,000
(*d*) Pakistan rupee coin	8,11,000
(*e*) India Subsidiary coin	1,61,000
(*f*) Pakistan Subsidiary coin	1,55,000

4. Balances with the State Bank:—
   (*a*) Principal Office 13,70,31,000
   (*b*) Other offices and branches 1,88,22,000
5. Advances in Pakistan 41,73,02,000
6. Bills Discounted in Pakistan 2,70,90,000

CLASS A_1—BANKS HAVING PAID-UP CAPITAL AND RESERVES OF RS. 5 LAKHS AND OVER—SCHEDULED BANKS (EXCLUDING IMPERIAL BANK OF INDIA)

(In thousands of Rupees)

As on 31st Dec.	No. of reporting banks	Capital and Reserves: Paid-up Capital	Capital and Reserves: Reserves	Capital and Reserves: Total	Deposits	Cash in hand and at Bank	Bills discounted and loans and advances	Investments in Government and other Securities.
1870	2	9,83	1,82	11,65	13,95	5,07	...	
1880	3	18,00	3,11	21,11	63,37	16,63	...	
1890	5	33,50	17,59	51,09	2,70,78	55,79	...	...
1900	9	82,12	45,60	1,27,72	8,07,52	1,19,04	...	...
1910	16	2,75,66	1,00,55	3,76,21	25,65,85	2,80,25	...	...
1920	25	8,37,02	2,55,46	10,92,48	71,14,64	16,30,70	...	...
1930	31	7,47,31	4,42,84	11,90,15	63,25,51	7,67,91	...	..
1931	34	7,80,30	4,28,14	12,08,44	62,26,44	7,71,03	...	...
1932	34	7,81,81	4,39,33	12,21,14	72,34,00	9,75,76	...	...
1933	34	7,78,24	4,55,28	12,33,52	71,67,43	10,91,64	...	...
1934	36	7,99,49	4,67,74	12,67,23	76,77,26	11,14,26	...	...
1935*	38	8,17,49	5,02,36	13,19,85	84,44,61	19,12,15	42,20,56	...
1936	27	6,37,75	4,57,02	10,94,77	90,07,71	14,36,10	45,64,91	36,19,97
1937	31	6,72,80	4,97,72	11,70,52	94,17,58	15,91,93	51,07,37	35,67,79
1938	32	6,64,90	4,28,07	10,92,97	91,78,45	13,44,57	47,69,30	40,23,99
1939	39	7,24,59	4,69,04	11,93,63	93,74,42	16,11,89	52,58,34	36,50,53
1940	41	7,77,65	4,89,43	12,67,08	1,06,10,08	25,02,43	48,94,64	42,44,86
1941	44	8,40,76	5,19,14	13,59,90	1,29,04,39	24,20,66	62,76,05	58,51,70
1942	44	10,68,04	5,57,33	16,25,37	1,89,33,83	43,76,69	60,67,61	1,01,76,76
1943	57	16,60,52	7,11,63	23,72,15	3,24,50,08	74,24,85	1,08,93,10	1,67,02,41
1944	69	22,03,76	10,02,02	32,05,78	4,36,56,86	90,40,15	1,57,88,35	2,32,08,04
1945	75	26,76,19	12,00,91	38,77,10	5,42,80,07	1,06,22,80	2,21,55,10	2,79,02,33
1946	80	29,72,92	14,68,48	44,41,40	6,24,32,39	1,20,56,11	3,07,60,50	2,79,07,67
1947A	81	30,86,84	15,78,10	46,64,94	6,23,33,96	1,27,43,83	2,84,56,56	2,85,31,66
1947B	2	56,73	25,11	81,84	27,38,86	7,32,93	6,70,39	17,51,05
TOTAL A & B.	83	31,43,57	16,03,21	47,46,78	6,50,72,82	1,34,76,76	2,91,26,95	3,02,82,71

* Figures upto 1935 include all Banks with Capital and Reserves of Rs. 5 lakhs and over. Figures since 1936 are for Indian Scheduled Banks only.

Note: A—Banks with Registered Offices in the Indian Dominion.
B—Banks with Registered Offices in Pakistan.

CLASS A_2—BANKS HAVING PAID-UP CAPITAL AND RESERVES OF RS. 5 LAKHS AND OVER—NON-SCHEDULED BANKS.

(In thousands of Rupees)

As on 31st Dec.	No. of reporting Banks	Capital and Reserves			Deposits	Cash in hand and at Banks	Bills discounted and loans and advances	Investments in Government and other Securities
		Paid-up capital	Reserves	Total				
1936* ..	9	61,49	53,23	1,14,72	5,40,42	73,27	3,92,31	1,27,11
1937	9	58,25	56,03	1,14,28	6,18,68	86,73	4,12,17	1,92,93
1938	9	73,08	59,73	1,32,81	6,11,50	52,37	4,41,91	2,07,10
1939	12	1,00,99	61,62	1,62,61	6,99,07	60,23	5,28,01	2,44,45
1940	17	1,31,30	67,24	1,98,54	7,88,37	1,23,76	5,49,24	2,74,97
1941	19	1,72,13	86,97	2,59,10	8,59,69	1,48,61	6,19,41	3,05,20
1942	25	1,92,48	83,71	2,76,19	13,41,05	3,53,07	7,47,13	4,74,28
1943	35	2,10,57	70,20	2,80,77	19,33,62	6,35,92	9,91,57	5,27,99
1944	49	3,62,56	1,05,67	4,68,23	39,06,47	15,77,45	17,09,85	10,67,36
1945	67	5,13,39	1,51,80	6,65,19	62,67,96	20,24,85	28,92,17	20,47,97
1946	61	5,21,91	1,54,56	6,76,47	64,47,46	18,64,42	31,00,98	23,57,72
1947A ..	65	4,86,73	1,75,41	6,62,14	51,92,09	11,97,90	31,33,64	17,80,39
1947B ..	5	31,89	7,40	39,29	1,89,84	43,74	1,02,95	63,33
TOTAL (A & B) ..	70	5,18,62	1,82,81	7,01,43	53,81,93	12,41,64	32,36,59	18,43,72

* Figures are for Indian Scheduled Banks only.

Note: A—Banks with Registered Offices in the Indian Dominion.
B—Banks with Registered Offices in Pakistan.

CLASS B—BANKS HAVING PAID-UP CAPITAL AND RESERVES BETWEEN RS. 1 LAKH AND RS. 5 LAKHS.

(In thousands of Rupees)

As on 31st Dec.	No. of reporting banks	CAPITAL AND RESERVES Pa -up ital		Tot	Dep	ash in hand and Banks	Bills d counted and loans nd advances	
1920	33	61,42	19,95	81,37	2,33,46	41,91		
1930	57	90,57	50,28	1,40,85	4,39,18	52,19		
1931	54	85,70	42,02	1,27,72	3,92,16	47,27		
1932	52	85,38	43,97	1,29,35	3,92,54	67,60		
1933	55	87,52	43,19	1,30,71	4,74,84	81,86		
1934	69	94,46	54,37	1,48,83	5,11,12	71,51		
1935* ..	62	86,31	52,43	1,38,74	5,27,67	82,15	4,59,25	
1936	71	94,06	52,72	1,46,78	5,46,41	99,54	4,74,28	58,08
1937	108	1,44,15	72,55	2,16,70	8,28,89	1,32,78	7,45,82	1,03,39
1938	120	1,62,48	78,70	2,41,18	8,72,42	1,28,90	7,73,61	1,33,53
1939 .. .	119	1,57,66	74,81	2,32,47	9,27,26	1,37,39	8,85,26	2,14,10
1940	122	1,67,42	76,44	2,43,86	11,03,96	2,24,47	8,14,05	2,08,31
1941	125	1,83,35	72,85	2,56,20	11,45,17	2,67,19	8,38,23	2,74,57
1942	136	1,99,86	71,49	2,71,35	15,60,22	4,59,31	10,08,51	3,57,69
1943	152	2,44,58	72,02	3,16,60	20,89,77	6,69,01	12,53,28	4,75,55
1944	162	2,77,33	67,85	3,45,18	26,31,53	7,86,91	16,42,66	5,88,48
1945	188	3,18,45	82,41	4,00,86	35,87,74	10,69,00	20,37,46	9,30,57
1946	198	3,39,70	85,88	4,25,58	35,79,80	7,86,91	24,02,89	9,95,84
1947A ..	185	3,07,44	86,32	3,93,76	29,47,14	5,95,45	21,29,38	7,74,86
1947B ..	17	33,32	7,67	40,90	1,87,25	46,87	1,30,03	45,09
TOTAL .. (A & B)	202	3,40,76	93,99	4,34,75	31,34,39	6,42,32	22,59,41	8,19,95

* Figures upto 1935 include all Banks with Capital and Reserves of Rs. 5 lakhs and over. Figures since 1936 are for Indian Scheduled Banks only.

Note: A—Banks with Registered Offices in the Indian Dominion
B—Banks with Registered Offices in Pakistan.

CLASS C—BANKS HAVING PAID-UP CAPITAL AND RESERVES BETWEEN RS. 50,000 AND RS. 1 LAKH

(In thousands of Rupees)

As on 31st Dec.	No. of reporting Banks	Capital and Reserves: Paid-up capital	Capital and Reserves: Reserves	Capital and Reserves: Total	Deposits	Cash in hand and at Banks	Bills discounted and loans and advances	Investments in Government and other Securities
1939	112	60,96	16,19	77,15	2,98,17	51,98	2,64,74	42,09
1940	121	65,42	18,54	83,96	2,85,82	58,72	2,58,69	43,62
1941	124	70,80	18,89	89,69	3,93,32	97,58	3,08,83	65,04
1942	137	76,88	20,57	97,45	4,94,58	1,55,74	3,39,73	79,64
1943	141	78,04	20,22	98,26	6,25,96	1,97,22	4,11,69	1,05,07
1944	113	62,00	17,56	79,56	5,82,70	1,59,52	3,75,51	1,17,71
1945	137	77,26	19,00	96,26	8,12,80	2,10,57	5,22,56	1,66,62
1946	135	75,20	18,89	94,09	5,93,27	1,32,43	4,50,67	99,56
1947A ..	119	66,87	17,22	84,09	4,54,51	82,31	3,86,63	80,28
1947B ..	12	5,91	1,78	7,69	93,59	25,69	53,35	7,34
TOTAL .. (A & B)	131	72,78	19,00	91,78	5,48,10	1,08,00	4,39,98	87,62

CLASS D—BANKS HAVING PAID-UP CAPITAL AND RESERVES LESS THAN RS. 50,000.

(In thousands of Rupees)

As on 31st Dec.	No. of reporting Banks	Capital and Reserves: capital	Capital and Reserves: Reserves	Capital and Reserves: Total	Deposits	Cash in hand and at Banks	Bills discounted and loans and advances	Investments in Government and other Securities
1939	400	61,52	14,27	75,79	2,63,23	38,03	2,86,06	22,62
1940	332	47,59	12,62	60,21	2,71,90	46,69	2,32,15	24,60
1941	147	21,53	4,62	26,15	83,82	13,19	84,40	6,60
1942	133	18,21	4,29	22,50	74,86	13,20	69,19	6,21
1943	161	22,49	6,14	28,63	1,59,38	44,09	1,21,13	14,15
1944	235	35,89	10,25	46,14	3,48,62	1,04,05	2,47,36	34,94
1945	254	39,20	9,64	48,94	4,05,73	1,17,35	2,80,41	53,44
1946	216	32,69	9,74	42,43	3,58,74	80,66	2,82,84	44,74
1947A ..	188	30,69	8,96	39,65	3,00,28	62,74	2,37,76	32,72
1947B ..	28	4,24	1,00	5,24	39,47	10,60	25,59	3,77
TOTAL .. (A & B)	216	34,93	9,96	44,89	3,39,75	73,34	2,63,35	36,49

*** Figures are for Indian Scheduled Banks only.**

***Note*: A—Banks with Registered Offices in the Indian Dominion.**
B—Banks with Registered Offices in Pakistan.

Branch Banking :—In England the big banks have strewn the country with their branches, and branch banking confined within proper limits tends to confer positive economic advantages upon a country. It helps to mobilise the savings of a society more effectively by transferring funds from one area to another according to local needs. It is especially true in India, where the agricultural industry has necessitated seasonal demands for money in different areas during various periods. Through branch banking it is possible to tap the resources of every part of the country, while assuring rural areas of the facility and credit of a good bank. It tends to distribute risks of investment over several industries scattered in different parts of the country, and to stabilise the volume of loanable capital throughout the country.

Unscrupulously controlled branch banking may result in an undesirable money monopoly. Any intensive competition amongst large banks may give rise to unnecessary multiplicity of banks. In Bengal particularly the branch banking has been utilised more as an evil than otherwise. Small banks are indiscriminately opening out uneconomic branches just to catch the public eye, and cases are not rare where these small banks, by opening branches in remote rural areas, are trying to exploit the unsuspecting rural folk and to land them in disaster. It is gratifying to observe that some checks have been imposed upon this type of reckless branch banking by the Banking Companies Act of 1949.

The Reserve Bank of India :—The Imperial Bank of India acted up to April 1, 1935, partly as a central bank and essentially as a commercial bank. It was however realised that a full-fledged central banking institution was necessary in India to ensure the financial stability of the country by unifying the banking and currency reserves into a single authority. The dual control of credit by banks and of currency by the Government was deprecated. The Hilton-Young Commission favoured the creation of a central bank, independent of the Imperial Bank, which should be left alone to fulfil its useful role in the credit of the country. It recommended a shareholders' bank with a constitution similar to that of the Imperial Bank. It also recommended a proportional reserve system of note issue. The first Reserve Bank Bill was introduced by the Government in January, 1927 and sought to give legislative effect to the scheme of a shareholders' bank as adumbrated by the Hilton-Young Commission.

It provoked a severe controversy in the Legislative Assembly and was abandoned. The bill was revived in 1928 only to court failure. The idea of a central bank for India again gathered momentum on the recommendations of the Central Banking Enquiry Committee in 1931. The Federal Structure Sub-Committee of the First Round Table Conference emphasised the desirability of such a bank. The White Paper on Indian Reforms published in 1933 made the establishment of a Reserve Bank free from political influence a condition precedent to responsibility at Centre. The London Committee on Reserve Bank Legislation reported in August, 1933 and the Reserve Bank of India Bill was introduced in the Legislative Assembly in September, 1933 and it became an Act on 8th March, 1934. The Reserve Bank of India started to function from 1st April, 1935, as a shareholders' bank and was nationalised from 1st January, 1949 by the Reserve Bank of India Amendment Act of 1948. After nationalisation, all the fundamental provisions of the original Act have been maintained and necessary alterations have been effected in sections which related to shareholders' rights and obligations. All the shares have been transferred to the Central Government free of all trusts, liabilities and encumbrances. The Government of India promissory notes of the 3 per cent First Development Loan, 1970-75 have been issued as compensation to the shareholders in exchange for their holdings at Rs. 118-10 for every share of Rs 100.

The preamble to the original Act states that it is expedient to start a Reserve Bank for India to regulate the issue of bank notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage.

It was originally a shareholders' bank with a capital of Rs. 5 crores, divided into shares of Rs. 100 each fully paid-up. Separate registers of shares were maintained at Calcutta, Bombay, Delhi, Madras and Rangoon, and each register was assigned a quota of shareholding. In order to check subsequent transfer of shares and concentration of the same in a few hands, the Reserve Bank of India Amendment Act was passed in March, 1940, restricting the rights of transfer and voting power.

The Bank opened offices in Bombay, Calcutta, Madras, Delhi, Cawnpore, Rangoon and Lahore, the latter two being subsequently

closed. It also established a branch in London. It is entitled to open branches or agencies elsewhere in India and outside with the consent of the Governor-General.

The general superintendence and direction of the bank was entrusted to a Central Board of Directors which consisted of 16 members, who were nominated by the Government. Local Boards were established for Calcutta, Bombay, Madras and Delhi with eight members, nominated by the Government. The Local Board had to advise the Central Board on such matters as might be generally or specifically referred to it and had to perform such duties as the Central Board might by regulation delegate to it. The Local Boards were thus mainly advisory in their nature.

The bank may accept deposits without interest from the Government, local authorities, banks and any other person. The Bank is empowered to buy, sell and rediscount bills of exchange and promissory notes, arising out of bona fide commercial transactions, bearing two or more good signatures, one of which must be that of a scheduled bank and maturing within 90 days from the date of such purchase or rediscount, exclusive of days of grace. In case of agricultural bills drawn or issued for financing seasonal agricultural operations or the marketing of crops, the period allowed is nine months, and one of the two signatures has to be that of a scheduled or a provincial co-operative bank. Bills maturing within 90 days since the date of purchase, bearing the signature of a scheduled bank, may also be purchased, sold or rediscounted if they are issued or drawn for holding or trading in Government securities. It is entitled to purchase from and sell to scheduled banks of sterling in amounts of not less than the equivalent of one lakh of rupees. It is also entitled to purchase, sell and rediscount bills of exchange drawn in or on any place in the United Kingdom provided such business is transacted with scheduled banks. The bank may keep balances with banks in the United Kingdom. It may advance loans and advances to States in India, local authorities, scheduled banks or provincial co-operative banks, repayable either on demand or on the expiry of fixed periods not exceeding 90 days, against trustee securities, gold or silver, eligible paper, promissory notes of scheduled or co-operative banks supported by documents of titles to goods. The bank may give ways and means advances to the Central Government or Local Governments repayable within 90 days. It may pur-

chase and sell securities of the Government of India and of the United Kingdom subject to certain maxima. The bank may act as agent to the Secretary of State, the Governor-General, Local Governments or local authorities in the matter of purchase and sale of gold or silver, management of public debt, etc. It may also make an agency agreement with central banks in other countries. The bank is authorised to borrow money for a period not exceeding one month from scheduled banks or other central banks. The bank is entitled to issue bank notes subject to certain conditions. It may generally transact all business incidental to or consequential upon the exercise of its powers and duties. It should be observed that the bank is authorised to purchase, sell and rediscount bills of exchange drawn on and payable in India in order to enable the bank to discount rupee import bills in the event of such bills coming into existence in the future. If in the opinion of the Central Board it is necessary to regulate credit in the interests of Indian trade, commerce, industry and agriculture, the bank may purchase, sell, or discount eligible papers (bills of exchange and promissory notes) directly in the open market (without the signature of a scheduled or a co-operative bank) or it may make loans and advances and purchase and sell sterling.

The bank is prevented from engaging in trade or having a direct interest in any commercial or industrial undertaking (except by way of satisfaction of its claims), purchasing its own shares, the shares of any other bank or any company and granting loans on such security. It is also prohibited from advancing money on immovable property or from owning such property (except for its own business premises, etc.), allowing interest on deposits and drawing or accepting bills payable otherwise than on demand.

It is a statutory obligation of the bank to transact Government business, *viz.*, to receive moneys and to make payments, to carry out their exchange, remittance and other banking operations, including the management of public debt. The bank has the right to transact Government business in India and is entitled to receive cash balances for deposits free of interest (except where the bank has no branches or agencies). The bank must also be entrusted with the issue of new loans.

The bank possesses the sole right of issuing bank notes in India. The Issue Department is separated from the Banking

Department on the model of the Bank of England and the Indian Act prescribes the proportional method of holding reserves and not the English method of a fixed amount of fiduciary issue. The assets and liabilities of the Issue Department are to be kept distinct from those of the Banking Department. The bank notes are legal tender and guaranteed by the Governor-General in order to promote greater confidence in the note issue, as recommended by the Hilton-Young Commission.

The assets of the Issue Department shall consist of not less than two-fifths of gold coin, gold bullion, sterling securities provided that the amount of gold shall not be less than Rs. 40 crores in value. Of the gold coin and gold bullion, not less than 17/20ths be held in India. The remaining three-fifths of the assets may be held in rupee-coin, Government of India rupee securities of any maturity and such bills of exchange and promissory notes payable in India as are eligible for purchase by the bank, provided that the rupee securities shall not exceed one-fourth of the total amount of the assets or Rs. 50 crores, whichever amount is greater, or with the previous consent of the Governor-General such amount plus a sum of Rs. 10 crores. Gold is to be valued at its par value, *i.e.*, 8·47512 grains of fine gold per rupee, rupee coin at its face value and securities at market rate. The bank is authorised, with the previous sanction of the Governor-General for periods not exceeding thirty days in the first instance which may, with like sanction, be extended from time to time by periods not exceeding 15 days, to hold as assets gold coin, gold bullion or sterling of less than two-fifths of the total assets. The bank is required to pay a tax on the deficiency during the period of suspension of assets requirements at bank rate with an addition of 1 per cent per annum when such holding exceeds 32½ per cent of the total assets, and of a further 1½ per cent in respect of every further decrease of 2½ per cent or part of such decrease, provided that the tax shall not in any event be payable at a rate less than 6 per cent per annum. The bank is obliged to supply different forms of currency. It is thus obliged to issue rupee coin on demand in exchange of bank notes and currency notes or bank notes in exchange of coin which is legal tender. It must convert notes of five rupees or upwards into notes of lower value or other coins which are legal tender in such quantities as may in the opinion of the bank be required

for circulation. The Governor-General shall supply such coins to the bank on demand. After joining the International Monetary Fund, the Reserve Bank accepts the principle of multilateral convertibility and has in consequence been empowered by an amending Act to hold as reserves other foreign securities and foreign exchanges. A large amount of sterling securities of the bank was utilised for the redemption of India's sterling debt and for the consolidated payment of sterling pensions and in consequence the limit on its holding of rupee securities was withdrawn by an amending Act in 1941.

There is a statutory obligation on the Bank to buy and sell sterling to maintain the exchange value of rupee at 1*s.* 6*d.*, although this provision has been amended since India joined the International Monetary Fund making it obligatory upon the Bank to make rupee multilaterally convertible.

Every bank carrying on the business of banking in India included in the second schedule (*i.e.*, having a paid-up capital and reserves of not less than Rs. 5 lakhs) is required to maintain with the Reserve Bank a balance the amount of which shall not be less than 5 per cent of its demand liabilities and 2 per cent of its time liabilities in India at the close of business on any day. This provision is intended primarily to enable the Reserve Bank of India to centralize the banking reserves of the country in order to be able to regulate and control the credit position in the country by controlling the total volume of bank money created by member banks. It also serves to provide for partial liquidity and safety of the deposits of member banks, who are also expected to keep sufficient till money. Every scheduled bank must also send a weekly return both to the Reserve Bank and the Governor-General, disclosing its demand and time liabilities in India, the total amount of the Government of India and bank notes held in India, the amounts held in rupee coin and subsidiary coin, the amount of advances made and bills discounted in India and the balances held at the Reserve Bank.

The Reserve Bank entered into an agreement with the Imperial Bank of India, subject to the approval of the Governor-General-in-Council for a period of fifteen years. It will remain in force thereafter until terminated after five years' notice on either side, provided the Imperial Bank maintains a sound financial position. The agreement provides that the Imperial

Bank is to be the sole agent of the Reserve Bank at all places in India, where there is a branch of the Imperial Bank of India at the time the Reserve Bank Act comes into operation and where there is no branch of the Banking Department of the Reserve Bank. The Reserve Bank is to pay the Imperial Bank for the first ten years a commission on the total of receipts and disbursements dealt with annually by the Imperial Bank on account of the Government. Later, the scale of commission will be revised. In consideration of the Imperial Bank of India maintaining the existing number of its branches, the Reserve Bank will pay to the former annually for the first five years Rs. 9 lakhs, for the next five years Rs. 6 lakhs, and for the next five years Rs. 4 lakhs. The Imperial Bank cannot open any branch in substitution for a branch existing at the time this agreement comes into force, without the approval of the Reserve Bank.

A Reserve Fund was created with Rs. 5 crores worth of rupee securities transferred to it by the Governor-General-in-Council. Originally a dividend limitation of a maximum of 6 per cent was fixed, although the Bank never paid any dividend exceeding 4 per cent up to the time of its nationalisation.

The Reserve Bank shall make public from time to time the standard rate at which it is prepared to buy or rediscount bills of exchange or other commercial paper eligible for purchase under this Act. The bank has discretion to discount agricultural bills at concessional rates below the rate for discounting or rediscounting commercial paper.

The bank is obliged to submit a weekly return to the Governor-General of the account of the Issue and Banking Departments in the prescribed form. It is to be published in the Gazette of India. Similarly a copy of the annual accounts is to be submitted to the same authority. The weekly returns of the bank indicate normally the conditions of the Indian money market.

The Reserve Bank Act imposed an obligation on the bank to create a special Agricultural Credit Department, which is to maintain an expert staff to study all questions of agricultural credit and should be available for consultation by the Governor-General, Local Governments, provincial co-operative banks and other banking organizations. The Department is to co-ordinate the operations of the bank regarding agricultural credit and its rela-

tions with provincial co-operative banks and any other bank or organizations engaged in the business of agricultural credit.

At the earliest possible time and in any case within three years of its establishment, the Reserve Bank was required to make a Report to the Governor-General-in-Council with proposals if it thought fit for legislation for the improvement of the machinery for dealing with agricultural finance and for effecting a closer correlation between agricultural enterprise and the operations of the bank. The bank was required to make a report regarding the extension of credit facilities to indigenous bankers.

M. L. Darling was accordingly deputed to investigate the working and present state of the co-operative banks and credit societies and the part which indigenous bankers play in the rural economy of the country. He submitted his report in May, 1935. The authorities of the bank, after considering the proposals, decided to request the Local Governments through the Government of India to collect and furnish to the bank further particulars regarding co-operative banks, credit societies and other agencies, *e.g.*, indigenous bankers and moneylenders, engaged in the business of agricultural credit. Meanwhile, the bank submitted to the Government of India in December, 1936, a preliminary report on agricultural credit in order to enable the various parties concerned to examine the entire question from a practical point of view. This was followed by the Statutory Report by the end of 1937. It indicated the various lines in which improvements could be effected in the mechanism of agricultural credit especially co-operative institutions with a view to assist Indian agriculture in collaboration with the Reserve Bank.

During these few years of working, the Reserve Bank has done very useful service in stabilising monetary conditions in India to a certain extent. During the war and in the post-war period, the Reserve Bank has been able to keep up the tempo of economic activities in India by maintaining cheap money conditions with prevailing low rates of interest. It has been assiduously maintaining the rupee value in terms of foreign currencies and controlling foreign exchanges in such a way that India may conserve those foreign exchanges, which are necessary for her development projects on various economic sectors. In India the demand for money is seasonal in character. Large funds are necessary from

November to June when money rates tend to rise, while precipitate declines in interest rates are noticeable during slack season from June to October. The Reserve Bank has succeeded to a great extent in equating these varying money rates through monetary manipulations. By organising a market in Government Treasury bills by selling the same by public tenders and through intermediaries, the Reserve Bank offers possiblitics of short-term investments during slack season. These Government Treasury bills maturable after three months also provide an opportunity of obtaining funds for the Government at reasonable rates of interest. The Reserve Bank frequently indulges in buying and selling Government Securities and thereby puts funds into the market when money is tight and draws surplus purchasing power when money conditions are easier. As stable security prices are an essential feature of a sound monetary system, the Reserve Bank operates in the security market to maintain gilt-edged prices. The Reserve Bank has been giving help and guidance to the co-operative movement through its Agricultural Credit Department. Although there is a statutory obligation of scheduled banks to keep a certain amount of their cash with the Reserve Bank, it is too small a part of the reserves, which are necessary to guarantee a sound working of the banking system. As it has been recognised that the powers of the Reserve Bank in relation to other banks, both scheduled and non-scheduled, are limited, the Banking Act of 1949 has been passed, bestowing requisite powers upon the Reserve Bank to regulate the banking systems of India. In addition, the Act has enabled the bank to expand its powers of discount and rediscount in order to encourage the development of a bill market in India, the absence of which is an outstanding drawback of India's monetary system. Owing to the existence of modern banks on one side and indigenous bankers on the other, there has grown a large variety of bills and hundies with no uniformity. Heavy stamp duties, lack of warehousing facilities, shyness of bankers' credits, etc., have stood in the way of a bill market to develop on modern lines. Although the Reserve Bank has been vested with powers and duties of controlling credit and currency, it will not be able to achieve any large measure of success, unless the numerous indigenous banks, controlling over 80 per cent of total credits in the country, are brought within the orbit of the bank.

A weekly statement of the Reserve Bank of India is reproduced below:—

RESERVE BANK

ISSUE DEPARTMENT

(In 000's of Rupees)

Week Ended

	27-5-49	20-5-49	28-5-48
LIABILITIES—			
Notes in Banking Deparrtment ...	32,25,35	23,78,66	21,62,95
Notes in circulation	11,78,87,26	11,87,17,32	13,28,85,06
Total Notes issued	12,11,12,61	12,10,95,98	13,50,48,01
ASSETS—			
A. Gold Coin and Bullion ...	40,01,71	40,01,71	44,41,45
Foreign Securities	7,10,34,38	7,10,34,38	11,35,32,89
Total of A	7,50,36,09	7,50,36,09	11,79,74,34
B. Rupee Coin	47,04,29	46,87,66	42,89,62
Rupee Securities Int. Bills of Ex. etc.	4,13,72,23	4,13,72,23	1,27,84,05
TOTAL ...	12,11,12,61	12,10,95,98	13,50,48,01

BANKING DEPARTMENT

	27-5-49	20-5-49	28-5-48
LIABILITIES—			
Capital paid-up	5,00,00	5,00,00	5,00,00
Reserve Fund	5,00,00	5,00,00	5,00,00
Deposits—			
(a) 1. Central Government ...	1,48,36,66	1,49,52,50	2,92,58,65
2. Other Governments ...	21,13,73	18,61,96	29,40,98
(b) Banks	65,70,20	63,68,75	1,02,09,18
(c) Others	60,21,08	60,81,20	44,81,03
Bills payable	4,33,41	5,55,77	1,91,66
Other Liabilities	16,41,35	16,38,70	17,41,98
TOTAL ...	3,26,16,43	3,24,58,88	4,98,28,48
ASSETS—			
Notes	32,25,35	23,78,66	5,21,62,95
Rupee Coin	13,47	9,31	12,14
Subsidiary Coin	1,55	1,53	1,48
Bills Discounted Int.	64,84	45,84	5,00
Government of India Treasury Bills	9,37,17	88,88,67	1,87,04
Balances held abroad	1,55,38,20	1,64,06,36	4,15,45,75
Loans to Governments	3,49,00	2,86,00	18,00
Other Loans, etc.	7,66,82	7,08,32	...
Investments	1,11,99,93	1,11,96,69	52,95,06
Other Assets	5,38,10	5,37,50	5,96,06
TOTAL ...	3,26,16,43	3,24,58,88	4,98,23,48

Central Government Treasury Bills :—These bills are a form of a short-term borrowing of the Government and are usually issued for a term of 3 months. They are sold through

the offices and branches of the Banking Department of the Reserve Bank (except at Delhi) either by tender or at an intermediate tap rate. The usual procedure for their sale is as follows: When it is decided that tenders should be called for, a press communique stating the date on which the tenders will be received, the amount and the currency of the bills offered for tender, and the date on which payment for accepted tenders should be made, is issued to the press for publication and is also communicated to important banks, brokers and firms. The applications for tender should state clearly the terms of the bills applied for, the amount of the bills required and the rate which the tenderer is prepared to pay. The rate offered should be expressed in rupees, annas and quarter annas for each Rs. 100 nominal of the bills applied for. If tenders received are in excess of the amount offered, a proportionate allotment is made when necessary, the minimum allotment being Rs. 25,000. Treasury bills are available in the following denominations only namely, Rs. 25,000, Rs. 50,000, Rs. 1 lakh, Rs. 5 lakhs, Rs. 10 lakhs and Rs. 50 lakhs. When it is decided to sell intermediate treasury bills on tap, an announcement to that effect is ordinarily included in the usual communique giving the results of the tenders, the rate for such bills also being announced at the same time. On maturity, the treasury bills are paid at the office or branch of the Reserve Bank from which they were issued.

Clearing System :—The clearing system is an essential adjunct of the modern banking organisation. The cheque system has become so popular that the bulk of financial transactions in modern society is done through the medium of cheques. When a creditor is paid by a cheque, he generally pays it to his banker, who collects it from the drawee bank and credits his customer with the same. Now, in this way, all banks in the country have cheques upon one another. Instead of going to each bank for actually collecting cash for a cheque, the banks in a country agree to meet in one place at different times of the day, and there they cancel their mutual obligations. This meeting place is the *Clearing House*, and every bank, who is a member of the clearing house maintains an account with the same. Credits and debits of banks are mutually cancelled, and any difference amongst them is either paid for or realised from, according to whether any bank becomes a debtor or a creditor.

Thus, the Clearing House system obviates the need of passing actual coins amongst them, and thereby minimises the risks of collection, and economises in time, expenses, etc. In India, the functions of the Clearing House are now performed by the Reserve Bank of India at Calcutta, Bombay, Madras, Cawnpore and Delhi. No bank can become a member of the Clearing House as by right. In order to be enlisted as a member, its name should be proposed and seconded by two existing members, and approved of by the majority of the members of the Clearing House. Since all Clearing Banks maintain accounts with the Reserve Bank, differences in their respective obligations are paid for by adjusting their accounts with the Reserve Bank at the Clearing House. Any bank who is a member of the Clearing House is known as a Clearing Bank.

Non-clearing banks, that is, those who are not members of the Clearing House experience great difficulties in practical working. Their cheques are not cleared through the Clearing House. The Clearing Banks generally send cheques of such banks to the latter for cash collection, and the expenses of collection are debited to the accounts of customers in whose credit such cheques are deposited. Hence, the people are reluctant to accept such cheques of non-clearing banks. Of late, however, these banks in Calcutta have made some private clearing arrangements amongst themselves. They have formed an association called the Metropolitan Banking Association which has made clearing arrangements for its members. All cheques of these members are presented in one place, and then they collectively pay one another in cash. Even Clearing Banks have agreed to go to this common meeting place, and collect cash for cheques of non-clearing banks. This arrangement has obviated the necessity of sending men for cash collection all over the place. As a result the Clearing Banks no longer charge their customers any collection expenses. The Metropolitan Banking Association also insists on the fulfilment of certain conditions before enlisting any bank as its member.

If any bank can make its clearing arrangement with a Clearing Bank, it is called a Sub-Clearing Bank. All cheques of the Sub-Clearing Banks pass through the Clearing House on the responsibility and guarantee of the Clearing Bank with which the Sub-Clearing Bank has made its arrangement.

The following table illustrates the position of cheque clearances:—

CLEARING HOUSE RETURNS

Number in thousand.
Rupees in lakhs.

			Bombay	Calcutta	Delhi	Kanpur	Madras	Total	Other Centres*
			1	2	3	4	5	6	7
Average of Months	1938-39	N	4,20	4,93	40	13	1,06	10,73	...
		A	65,52	77,89	1,55	98	8,24	1,54,18	2,36
	1947-48	N	6,98	6,40	64	35	1,98	16,34	2,79
		A	2,04,39	2,16,66	10,54	9,15	29,00	4,69,74	42,79
	1948-49	N	7,61	5,42	72	44	2,16	16,36	3,33
		A	2,28,21	2,21,27	12,39	11,70	33,50	5,07,08	50,13
January, 1949		N	8,16	5,51	79	42	2,14	17,02	3,38
		A	2,48,73	2,32,48	12,32	11,36	34,53	5,39,41	52,40
February, „		N	7,43	5,15	70	42	2,21	15,92	2,97
		A	2,02,52	1,96,10	12,09	11,02	35,91	4,57,64	42,61
March „		N	8,43	6,02	87	45	2,59	18,36	3,65
		A	2,62,33	2,49,93	15,62	12,78	38,84	5,79,50	56,95
Week ended March 4, 1949		N	1,97	1,29	16	10	62	4,14	
		A	61,39	58,35	2,36	2,82	8,97	1,33,89	...
„ 11, „		N	1,98	1,34	21	10	60	4,24	
		A	55,53	51,56	3,82	2,37	8,12	1,21,41	...
„ 18, „		N	1,75	1,18	15	7	58	3,72	
		A	54,22	46,81	1,98	1,91	9,27	1,14,19	...
„ 25, „		N	1,76	1,41	21	11	57	4,06	
		A	55,21	56,33	3,74	3,40	8,75	1,27,42	...

N—Number of Cheques. A—Amount.

* Ahmedamad, Amritsar, Calicut, Coimbatore, Lucknow, Madura, Mangalore, Nagpur, Simla, Patna (from April, 1943), Allahabad (from October, 1943), Bangalore (from October, 1944), Jullundur (from February, 1945), Agra (from May, 1945), Dehra Dun (from February, 1946), Alleppey (from November, 1946), Rajkot (from January, 1947), Gaya (from March, 1947) and Poona and New Delhi (from August, 1947).

Postal Savings Banks, etc. :—Government Savings Banks were established in the Presidency towns between 1833 and 1835. District Savings Banks were started in 1817 in connection with certain select district treasuries. The Post Office Savings Banks were opened in all parts of India in 1882 and 1883, and absorbed the District Savings Banks' business in 1886 and that of the Presidency Savings Banks in 1896. These Postal Savings Banks provide the lower income groups of people with means of keeping their money in the safe custody of the Government, which do not

maintain any specific cash reserves against their liabilities. These are treated as unfunded debt for capital expenditure. The Government provided increased facilities in 1914 to depositors by raising the limit of the amount of annual and total deposits, allowed to an individual depositor. The limit has been increased further since that date. In order to popularise these banks, the Government have offered facilities to sell various Government Bonds through Post Offices. The following table illustrates the popularity of these institutions.

POSTAL SAVINGS

Lakhs of Rupees.

	Cash Certificates		Defence Savings Certificates†	National Savings Certificates		Savings Bank Deposits		Defence Savings Bank Deposits	
	Receipts	Outstandings*	Outstanding*	Receipts	Outstandings*	Receipts	Outstandings*	Receipts	Outstandings*
	1	2	3	4	5	6	7	8	9
1938-39	14,71	59,57				44,61	81,88		
1946-47	4,97	39,22	5,18	21,76	70,62	91,68	1,42,35	49	10,93
1947-48—									
Up to 14th Aug.	1,06	37,69	4,79	7,18	74,98	38,67	1,46,81	—	6,02
From 15th Aug.‡	—	—3,07	—40	13,22	9,21	47,88	11,03	—	—3,17
December 1947	—	—1,74	—24	1,93	5,73	6,14	2,75	—	—2,39
January 1948	—	—2,19	—30	1,99	7,02	5,96	3,40	—	—2,74
February "	—	—2,60	—35	1,83	8,09	6,10	4,94	—	—2,97
March "	—	—3,07	—40	2,24	9,21	12,25	11,03	—	—3,17
April "	—	—3,47	—44	2,21	10,45	7,12	13,28	—	—3,31
May "	—	—3,94	—48	3,16	12,89	7,25	14,79	—	—3,43
June "	1	—4,30	—51	1,65§	13,92§	9,26	18,80	—	—3,52
July "	—	—4,68	—53	1,43	14,79	7,39	21,15	—	—3,59
August "	—1	—5,01	—56	1,47	15,77	6,39	22,80	—	—3,66
September "	—	—5,38	—59	1,69	16,93	7,31	24,88	—	—3,73
October "	—	—5,73	—62	1,76	18,28	6,05	25,60	—	—3,80
November "	—	—6,08	—64	1,77	19,61	6,11	26,26	—	—3,85
December "		—6,46	—67	1,99	21,11	6,66	26,94	—	—3,92
January 1949		—6,80	—71	1,84	22,45	6,38	27,61	—	—3,96

* At the end of period.

† Were replaced by National Savings Certificates from 1st October, 1943.

‡ Figures from 15th August, 1947 relate to India only. Outstandings from 15th August, 1947 represent the balance of the Indian Dominion only as from that date and do not include India's share of the earlier outstandings.

§ Including 5 year and 7 year National Savings Certificates issued from 1st June, 1948.

The Indian Money Market :—The Indian Money market consists of several constituents, which are loosely interlinked with one another. It is found in practice that each section carries on distinct types of business and amongst the indigenous bankers there are various distinct groups doing individual categories of business and charging differing rates of interest. The Indian Joint-stock Banks are in competition with the Imperial Bank of India and exchange banks and there is lack of proper co-operation amongst them. Even amongst the joint-stock banks, there is undesirable relation between the small-sized and big banks. The co-operative banks stand by themselves and have little contacts with other banking systems. Although the Reserve Bank has been attempting to co-ordinate the activities of all banking institutions, progress achieved so far is negligible. The real difficulty lies with the indigenous banks, which control a large part of the total credits in the country.

The sectional organisation of the money market has caused confusion in money rates throughout the country. It was remarked by the Central Banking Enquiry Committee that the fact that a call rate of $\frac{3}{4}$ per cent, a hundi rate of 3 per cent, a bank rate of 4 per cent, a Bombay bazar rate for bills of small traders of 10 per cent can exist simultaneously indicates an extraordinary sluggishness in the movement of credit between the various markets. In consequence, there is no close inter-relation between the Bank Rate, that is, the Reserve Bank Rate and other money rates, which are not influenced by the Bank Rate as in other countries. That different rates prevail in various centres is illustrated by the table on p. 418.

There is little co-relation between the bazar rate and other banks' rates. The shroffs discount hundies, give loans to cultivators and they do not discount trade bills nor purchase Government loans. They do not even lend on Government papers. Or in other words, they do not usually compete with joint-stock banks and are largely independent of the latter. Hence other banks' rates do not influence shroffs' rates, although in times of stringency the shroffs' rate tends to approximate to banks' rate, when shroffs are forced to obtain funds from banks. The remedy of such a confusion in money rates lies in organising a proper bill market in India under the aegis of the Reserve Bank of India.

SHORT-TERM MONEY RATES

Per cent per annum

Average of Fridays	Government of India Treasury Bill Rate	Call Money Rate			Deposit Rate					
					3 months			6 months		
		Bombay	Calcutta	Madras	Bombay	Calcutta	Madras	Bombay	Calcutta	Madras
	1	2	3	4	5	6	7	8	9	10
	R. A. P.									
1947-48	0 7 2	1/2	1/2	3/4	3/4	1/2	1/4	1-1/8	3/4	1/2
1948-49	0 7 11	9/16	1/2	3/4	1-1/8	1/2	1/4	1-7/16	3/4	1/2
February 1948	0 7 11	1/2	1/2	3/4	5/8	1/2	1/4	1-5/16	3/4	1/2
March "	0 8 0	1/2	1/2	3/4	1-1/8	1/2	1/4	1-3/8	3/4	1/2
April "	0 7 11	1/2	1/2	3/4	1-1/8	1/2	1/4	1-3/8	3/4	1/2
May "	0 8 0	1/2	1/2	3/4	1-1/8	1/2	1/4	1-3/8	3/4	1/2
June "	0 7 11	1/2	1/2	3/4	1-1/8	1/2	1/4	1-3/8	3/4	1/2
July "	0 7 2	1/2	1/2	3/4	1-1/8	1/2	1/4	1-3/8	3/4	1/2
August "	0 7 11	1/2	1/2	3/4	1-1/4	1/2	1/4	1-3/8	3/4	1/2
September "	0 8 6	1/2	1/2	3/4	1-1/8	1/2	1/4	1-3/8	3/4	1/2
October "	0 8 11	1/2	1/2	3/4	1-1/8	1/2	1/4	1-3/8	3/4	1/2
November "	—	1/2	1/2	3/4	1-1/8	1/2	1/4	1-3/8	3/4	1/2
December "	—	5/8	1/2	3/4	1-1/8	1/2	1/4	1-3/8	3/4	1/2
January 1949	—	13/16	9/16	3/4	1-1/4	1/2	1/4	1-5/8	3/4	1/2
February "	—	3/4	1/2	3/4	1-1/8	1/2	1/4	1-5/8	3/4	1/2
March "	—	3/4	1/2	3/4	1-1/8	1/2	1/2	1-5/8	3/4	3/4

Note:—Reserve Bank of India Rate 3 per cent from 28th November, 1935. Imperial Bank of India Hundi Rate 3 per cent from 24th January, 1941 to 18th January 1949 and $3\frac{1}{2}$ per cent thereafter.

The seasonal demand for money is an outstanding feature of the Indian money market. From November to June, large funds are necessary to finance crop movements and money rates show upward trends, while from July to October, money returns to banks and the slack season is witnessed, bringing about declines in money rates. The Reserve Bank has succeeded to a large extent in equating money rates over different periods by maintaining the Bank Rate unchanged, selling Government Treasury Bills during slack seasons and undertaking open market operations in securities. It has not yet been able to utilise the most influencial mechanism of the discount rate to any effective degree owing to the absence of a bill market.

The Bill Market in India :—The lack of an organised bill market is an outstanding drawback of the Indian money market. A bill market is essential for the smooth working of the credit structure of a country. A central bank will not be able to control credit in the absence of a bill market. In India, the scheduled banks invested only 16·48 crores in bills for the week ended 27th May, 1949 out of their total deposits of Rs. 875·94 crores and this discloses the paucity of bills in this country. The Reserve Bank of India finds difficulty of making advances to banks, who cannot produce sufficient discountable papers. In order to meet this difficulty, the Reserve Bank has now been authorised to advance on any securities, which the Bank may deem to be proper cover. This is only a palliative measure and unsound from the banking point of view. Attempts should be made to expand the bill portfolio of banks, who can approach the Reserve Bank for advances by offering sufficient discountable papers. The present tendency of joint-stock banks to invest relatively large funds in Government securities should be discouraged. The development of a bill market in India has been among other factors impeded by the defective grounding of the bazar hundi, which is not readily acceptable to banks, which are obliged to insist on the personal security of the endorsing shroff, if he happens to be on the bank's list of approved shroffs. It is not clear on the face of a bazar hundi whether it is a pure finance bill or a genuine trade bill, since it is not always accompanied by documents like sale contracts, invoices, documents of title, etc., whereby the bill could be supported and connected with a particular lot of goods or produce. The free use of hundis is rendered difficult by the variety of languages in which the hundis are drawn, diversity of customs regarding days of grace, etc., widespread illiteracy of the masses, the heavy stamp duty on mudati hundis (usance bills), etc. The development of a bill market in India has been hampered by the system of cash credits which is largely in practice in inland trade finance in India. It offers certain advantages to the lender and the borrower.

Among various measures suggested to develop a bill market, it has been stated that the Reserve Bank of India should be prepared to buy or rediscount at its published rate first-class trade bills and promissory notes arising out of bona fide commercial transactions and should at its discretion charge higher rates for

demand loans against authorised securities. The Joint-stock Banks should be persuaded to avail themselves fully of the facilities of rediscounting commercial paper thus offered. Discounting charges should be reduced in order to facilitate the use of bills and a clearing house for bills should be established in all provincial capitals. Warehouses ought to be provided in various parts of India to encourage the use of bills, as this is likely to replace the pure finance or accommodation bills drawn by merchants and shroffs by documentary bills which would be readily discounted by banks. The high rate of stamp duty on usance bills militates against larger use of bills. The Central Banking Enquiry Committee recommended a substantial reduction of this duty. The stamp duty was reduced, with effect from 13th January, 1940. The noting of dishonour and protest by recognised associations of banks, shroffs and merchants should be validated to save inconvenience and trouble to the owner of the instrument. Customs governing hundies should be standardized in order to popularise their circulation. Banks should take the initiative in creating bank acceptances, which would be more readily negotiable than ordinary trade bills. It has also been suggested that a discount market should be established by the adoption of bill-broking as an integral part of the indigenous bankers' business and by the formation of discount houses under the aegis of the Reserve Bank through these bankers and their wealthy depositors. The use of bills should be expanded regarding advances for cultivation and for financing the marketing of crops, village bankers by shroffs, the movement of goods from the port town to the interior and the foreign trade of the country.

Banking Laws in India :—The Indian joint-stock banks were regulated up to 1936 by the Indian Companies Act of 1913 like other joint-stock companies with only special requirements as to special forms in which to prepare balance sheets and submit statement of affairs to be published twice a year. The Central Banking Enquiry Committee recommended for a Banking Act, but the Government in stead amended the Indian Companies Act in 1936 to give effect to certain recommendations of the Central Banking Enquiry Committee. Then on the proposals of the Reserve Bank of India in 1939, the Government of India drafted a Bank Bill in 1939, which was shelved owing to World War II.

The Indian Companies Act was amended in 1942 to define a banking company. Again on the recommendations of the Reserve Bank of India, the Indian Companies (Amendment) Act of 1944 was passed in March, 1944, introducing certain important provisions regarding banking companies. The Act prohibited a bank from employing a managing agent or any person whose remuneration or part of whose remuneration took the form of commission or a share in the profits of the Company or any person having a contract with the Company for its management for a period exceeding five years at a time, and also imposed the following restrictions on a banking company incorporated after the 15th January, 1937:—

(*a*) The subscribed capital should not be less than half the authorised capital and the paid-up capital should not be less than half the subscribed capital.

(*b*) The capital of the Company should consist of ordinary shares only or of such ordinary and preference shares as were issued before the commencement of the Act.

(*c*) The voting rights of all share-holders should be strictly in proportion to the contribution made by the share-holders to the paid-up capital.

In order to allow existing companies to comply with the requirements of the amended law, it was declared that these provisions would come into force two years after the commencement of the Act.

The necessity for a comprehensive banking legislation remained in spite of the sporadic provisions made from time to time to regulate banking. It became more and more apparent to protect the interests of depositors and vest necessary powers in the Reserve Bank to put India's banking system on a sound and healthy working basis. Therefore the Reserve Bank put forward proposals for a banking legislation to the Government in 1944 and a banking Bill was introduced in the Central Legislative Assembly in November, 1944, but it lapsed. A new Bill essentially on the basis of the old one was again placed in the Legislative Assembly in March, 1946 and after being referred to a Select Committee, it was withdrawn in early 1948. Then a fresh Bill incorporating all the necessary amendments was introduced on 22nd March, 1948. The Bill was referred to a Select Committee,

which reported in early 1949. The Bill received the assent of the Governor-General on 10th March, 1949.

Pending the passing of the Banking Companies Act, the Banking Companies (Control) Ordinance, 1948, was promulgated on 18th September, 1948, bring into immediate effect some of the important provisions of the Banking Companies Bill. The main features of the Ordinance are outlined below:

(*i*) It authorised the Reserve Bank to grant emergency advances against such forms of securities as it deemed sufficient.

(*ii*) It prohibited the granting of unsecured loans and advances by banking companies to its directors, and to firms and private companies in which the directors were interested, and required banking companies to submit to the Reserve Bank returns of unsecured loans to companies, other than private companies, in which the directors were interested.

(*iii*) It provided for the maintenance by banking companies, at the end of each quarter, of assets in India not less than 75 per cent of their Indian demand and time liabilities.

(*iv*) It empowered the Reserve Bank to give directions in the public interest to any or all banks in regard to their lending policies in general and any transactions in particular.

(*v*) It enabled the Reserve Bank to apply to a court to be appointed as official liquidator, so that where necessary and possible, the Reserve Bank might arrange for the orderly liquidation of a bank that was being wound up.

(*vi*) It prohibited amalgamation or schemes of arrangements or compromise without the concurrence of the Reserve Bank, so that schemes which were detrimental to the depositors' interest might not be adopted. It also empowered the Reserve Bank to assist as an intermediary in proposals for amalgamation.

(*vii*) The Reserve Bank was empowered to call for periodic and *ad hoc* returns relating to the liabilities and assets

of banks, and to publish in any form, if it considered necessary in the public interest, any information called for under this Ordinance.

The Banking Companies Act of 1949 states that the provisions of this Act shall be in addition to, and not, save as expressly provided, in derogation of, the Indian Companies Act, 1913 and any other law for the time being in force. Nothing in this Act shall apply to a co-operative bank registered under the Co-operative Societies Act, 1912 or any other law for the time being in force in any Province of India relating to co-operative societies.

After defining fully the business of a banking company, the Act prohibits the employment of a managing agent as far as banking business is concerned. Among others it also prohibits any person from managing a bank if he is a director of any other company, not being a subsidiary company of the banking company; or who is engaged in any other business or vocation; or who has a contract with the company for its management for a period exceeding five years at any one time.

The Act also empowers the Reserve Bank to call for any information from a bank which it may deem proper and publish the same if necessary. The Act also prescribes the method in which accounts of a bank should be maintained and audit done. The balance sheet is to be published in a prescribed manner. The Reserve Bank is also vested with wide powers of inspection and of tendering advice to banking companies. It also empowers the Reserve Bank to advise in matters of amalgamation and liquidation.

No banking company in existence on the commencement of this Act, shall, after the expiry of three years from such commencement or of such further period not exceeding one year as the Reserve Bank, having regard to the interests of the depositors of the company, may think fit in any particular case to allow, carry on business in any Province of India, and no other banking company shall, after the commencement of this Act, commence or carry on business in any Province of India, unless it has paid-up capital and reserves of such aggregate value as is hereinafter required by this section.

In the case of a banking company incorporated elsewhere than in a Province of India, the aggregate value of its paid-up capital and reserves shall not be less than fifteen lakhs of rupees, and, if

it has a place or places of business in the City of Bombay or Calcutta or both, twenty lakhs of rupees:

Provided that no such banking company shall be deemed to have complied with the provisions of this sub-section, unless it deposits and keeps deposited with the Reserve Bank an amount not less than the minimum required by this sub-section, either in cash or in unencumbered approved securities or partly in cash and partly in such securities.

In the case of any banking company to which the above provisions do not apply, the aggregate value of its paid-up capital and reserves shall not be less than—

(*i*) if it has places of business in more than one Province, five lakhs of rupees, and if any such place or places of business is or are situated in the City of Bombay or Calcutta or both, ten lakhs of rupees;

(*ii*) if it has all its places of business in one Province none of which is situated in the City of Bombay or Calcutta, one lakh of rupees in respect of its principal place of business, *plus* ten thousand rupees in respect of each of its other places of business situated in the same district in which it has its principal place of business, *plus* twenty-five thousand rupees in respect of each place of business situated elsewhere in the Province otherwise than in the same district:

Provided that no banking company to which this clause applies shall be required to have paid-up capital and reserves exceeding in aggregate value of five lakhs of rupees;

Provided further that no banking company to which this clause applies and which has only one place of business, shall be required to have paid-up capital and reserves exceeding an aggregate value of fifty thousand rupees;

(*iii*) if it has all its places of business in one Province, one or more of which is or are situated in the City of Bombay or Calcutta, five lakhs of rupees, *plus* twenty-five thousand rupees in respect of each place of business situated outside the City of Bombay or Calcutta, as the case may be:

Provided that no banking company to which this clause applies shall be required to have paid-up capital and reserves exceeding an aggregate value of ten lakhs of rupees.

No banking company shall carry on business in any Province of India, unless it satisfies the following conditions, namely:—

(*i*) that the subscribed capital of the company is not less than one half of the authorised capital, and the paid-up capital is not less than one half of the subscribed capital and that, if the capital is increased, it complies with the conditions prescribed in this clause within such period not exceeding two years as the Reserve Bank may allow;

(*ii*) that the capital of the company consists of ordinary shares only or of ordinary shares and such preference shares as may have been issued prior to the 1st day of July, 1944;

(*iii*) that, subject to the provisions contained in clause (iv) hereof, the voting rights of any one shareholder, whether a preference shareholder or an ordinary shareholder, are strictly proportionate to the contribution made by him to the paid-up capital of the company;

(*iv*) that the voting rights of any one shareholder do not exceed five per cent. of the total voting rights of all the shareholders:

Provided that nothing contained in this section shall apply to any banking company incorporated before the 15th day of January, 1937.

No banking company shall pay any dividend on its shares until all its capitalised expenses (including preliminary expenses, organisation expenses, share-selling commission, brokerage, amounts of losses incurred and any other item of expenditure not represented by tangible assets) have been completely written off.

Every banking company incorporated in a Province of India shall maintain a reserve fund, and shall, out of the net profits of each year and before any dividend is declared, transfer a sum equivalent to not less than twenty per cent. of such profits to the reserve fund until the amount of the said fund is equal to the paid-up capital.

Every banking company not being a scheduled bank shall maintain by way of cash reserve in cash with itself, or in an account opened with the Reserve Bank, or partly in cash with itself, and

partly in such account, a sum equivalent to at least two per cent. of its time liabilities and five per cent. of its demand liabilities and shall file with the Reserve Bank before the fifteenth day of every month three copies of a statement of the amount so held on Friday of each week of the preceding month with particulars of its time and demand liabilities on each Friday.

No banking company shall make any loans or advances on the security of its own shares, or grant unsecured loans or advances to any of its directors or to firms or private companies in which it or any of its directors is interested as partner or managing agent or to any individuals, firms or private companies in cases where any of the directors is a guarantor.

Every banking company shall, before the close of the month succeeding that to which the return relates, submit to the Reserve Bank a return in the prescribed form and manner, showing all unsecured loans and advances granted by it to companies in which it or any of its directors is interested as director or managing agent or guarantor.

If, on examination of any return submitted, it appears to the Reserve Bank that any loans or advances referred to in that sub-section are being granted to the detriment of the interests of the depositors of the banking company, the Reserve Bank may, by order in writing, prohibit the banking company from granting any such further loans or advances or impose such restrictions on the grant thereof as it thinks fit, and may by like order direct the banking company to secure the repayment of any such loan or advance within such time as may be specified in the order.

Where the Reserve Bank is satisfied that it is necessary or expedient in the public interest so to do, it may determine the policy in relation to advances to be followed by banking companies generally or by any banking company in particular, and when the policy has been so determined, all banking companies or the banking company concerned, as the case may be, shall be bound to follow the policy as so determined.

The Reserve Bank may give directions to banking companies, either generally or to any banking company or group of banking companies in particular, as to the purpose for which advances may or may not be made, the margins to be maintained in respect of secured advances and the rates of interest to be charged

on advances, and each banking company shall be bound to comply with any directions as so given.

No company shall carry on banking business in any Province of India unless it holds a licence granted by the Reserve Bank in such behalf.

Every banking company in existence on the commencement of this Act, before the expiry of six months from such commencement, and every other company before commencing banking business in any Province of India, shall apply in writing to the Reserve Bank for a licence.

Before granting any licence under this section, the Reserve Bank may require to be satisfied by an inspection of the books of the company or otherwise that all or any of the following conditions are fulfilled, namely:—

(*a*) that the company is in a position to pay its depositors in full as their claims accrue;

(*b*) that the affairs of the company are not being conducted to the detriment of the interests of its depositors;

(*c*) in the case of a company incorporated elsewhere than in a Province of India that the Government or law of the country in which it is incorporated does not discriminate in any way against banking companies registered in a Province of India, and that the company complies with all the provisions of this Act, applicable to banking companies incorporated outside the Provinces of India.

The Reserve Bank may—

(*a*) cancel any licence granted where any of the conditions on the fulfilment of which it required to be satisfied when granting the licence, ceases to be fulfilled or if the company ceases to carry on banking business in the Provinces of India or goes into liquidation;

(*b*) at any time after granting a licence under this section require that any of the said conditions, on the fulfilment of which it did not require to be satisfied when granting the licence, shall be fulfilled to its satisfaction within such time as it may specify, and if the condition is not so fulfilled, cancell the licence.

Any banking company aggrieved by the cancellation of its licence may appeal to the Central Government, and the decision of the Central Government on such appeal shall be final.

The Act provides for restrictions on opening of new, and transfer of existing, places of business.

After the expiry of two years from the commencement of this Act, every banking company shall maintain in cash, gold or unencumbered approved securities, valued at a price not exceeding the current market price, an amount which shall not at the close of business on any day be less than twenty per cent of the total of its time and demand liabilities in the Provinces of India.

The assets in the Provinces of India of every banking company at the close of the last working day of every quarter shall not be less than seventy-five per cent of its demand and time liabilities therein.

Every banking company shall, within one month from the end of every quarter, submit to the Reserve Bank a return in the prescribed form and manner of the assets and liabilities thus referred to as at the close of the last working day of the previous quarter.

Although the Banking Companies Act has been devised as a measure to canalise Indian banking along sound lines and insulate it against recurring crisis, following mismanagement and fraudulent practices, the Act confers wide and discretionary powers in the Reserve Bank. It is anticipated that the Reserve Bank will use these powers with care and discretion, especially during the present stage of its development when it does not possess sufficient technical personnel. The Reserve Bank should always examine that in exercising any of its powers, it does not interfere with the normal working of sound banks. It should always be remembered that a healthy banking system develops under the nursing of good bankers and not under the shelter of banking laws.

Stock Exchanges in India :—The stock exchange plays a very important role in the modern economic system. It is a very important institution for the mobilisation of savings and capital of the society. People generally pass on their savings and money to be utilised as capital in modern industry and commerce through the medium of shares and stocks by way of investment.

The stock exchanges provide markets for these shares and stocks, and thereby impart to them the fundamental quality of marketability and liquidity. The stock exchanges have thus given good markets for invested capital, and facilitated savings. People are now more willing to invest in shares and stocks, as they are easily realisable and marketable at true values, which are determined according to their interest-earning or dividend-yielding capacities.

It has been found in practice that security prices influence money rates in the country. The function of the Reserve Bank of India to regulate the monetary supplies through the mechanism of open market operations in securities depends for its effectiveness upon stock exchanges, which provide free markets in securities. As large sums are invested in stock exchanges, they exercise a great influence on the money market. Stock exchanges in India like other countries are an essential adjunct of the money market. India has full-fledged stock exchanges working in Bombay, Calcutta and Madras and they are administered by rules and regulations made from time to time by stock exchange authorities. Stock exchanges are also developing in smaller towns like Cawnpore, Delhi and Ahmedabad.

Industrial Finance Corporation :—As there is no suitable agency in this country to provide industries with medium and long-term credits, the Government of India has recently enacted a legislation providing for the establishment of an Industrial Finance Corporation. Its specific object will be to supply long and medium-dated loans to deserving industries. The Corporation will be treated as an ordinary company under the Indian Companies Act. Financial aid from the Corporation will be available only to public limited companies and co-operative societies, private limited companies and partnerships being excluded from its benefits. The authorised capital of the Corporation has been increased from Rs. 5 crores to Rs. 10 crores, of which half has been issued for subscription immediately and the balance as and when necessary. Share capital has been issued only to approved institutional investors, and not to private individuals. The Government of India guarantees shareholders in respect of both principal and interest, the rate of the latter being fixed at a level regarded as appropriate at the time of the issue of the shares. The Corporation has already issued

10,000 shares of Rs. 5,000 each and these shares are distributed as follows:—

(i)	Central Government	2,000 Shares.
(ii)	Reserve Bank	2,000 „
(iii)	Scheduled Bank	2,500 „
(iv)	Insurance Companies, Investment Trusts and financial similar Institutions	2,500 „
(v)	Co-operative Banks	1,000 „
		10,000 Shares.

The management of the Corporation is in the hands of a Board of twelve members, six nominated by Government and six elected by the shareholders. The Corporation has powers to borrow up to an amount equivalent to five times its paid-up capital and reserves; fixed deposits will be accepted by the Corporation with a maturity of five years. It is also empowered to make loans in foreign currencies if it so wishes. Borrowing companies will be required by the Corporation to limit dividends to a particular rate until the loan is repaid. The Corporation is entitled to borrow five times its capital including reserves. The Corporation has already started functioning.

It may be observed that several provinces have also established their own Finance Corporations to help industrial finance.

Indian Institute of Bankers :—The Indian Institute of Bankers was registered at Bombay under the Indian Companies Act on 20th April, 1928. The main objects of the Institute are to support and protect the character, status and interests of persons engaged in or connected with the business of banking generally and especially in India and consider all questions affecting them. It is to encourage the study of the theory of banking and institute a scheme of examinations and grant of certificates, scholarships and prizes, spread information on banking and allied subjects through lectures, discussions, periodicals, books, correspondence with public bodies or individuals, etc. It collects and circulates statistics and other information regarding banking in India.

The examinations held by the Institute have become very popular and the Institute is fast developing as a medium of co-ordinating banking practice in India.

Pakistan Currency and Banking Systems :—When the partition of India occurred on 15th August, 1947, it was not possible for the Dominion of Pakistan to start with an independent monetary system. In order therefore to tide over the transition period, the Pakistan Monetary System and Reserve Bank Order, 1947 was issued, whereby the existing currency and banking mechanism under the aegis of the Reserve Bank of India was allowed to continue till 30th September, 1948.

The Reserve Bank of India continued to be the sole note-issuing authority in Pakistan till 30th September, 1948 and "India Notes" continued to be legal tender in Pakistan till then. The Reserve Bank would issue after 1st April, 1948, "Pakistan Notes". After 30th September, 1948, however, the Reserve Bank would not issue any notes for Pakistan and the Government of Pakistan had to make its own arrangements for issuing currency notes.

Soon after 30th September, 1948, assets of a value equal to the "Pakistan Notes" would be transferred from the Issue Department of the Reserve Bank to the Government of Pakistan. The Government of Pakistan would accept "India Notes" at par until 31st March, 1949, and assets of value equal to such "India Notes" outstanding in Pakistan would be transferred from the Issue Department to the Government of Pakistan.

As in the case of currency notes issued by the Reserve Bank, the rupee coins and subsidiary coins issued by the Government of India will be legal tender in Pakistan at least one year from the introduction of the corresponding "Pakistan coins". The Reserve Bank after 31st March, 1948, would put into circulation "Pakistan coins" as far as possible and use "India coins" only to supplement them when they are in short supply. After 30th September, 1948, the Government of Pakistan would be responsible for issuing coins.

The Reserve Bank continued to act as a banker to both the Central and Provincial Governments of India and Pakistan till 30th September, 1948. The management of the public debt, the issue of new loans and exchange operations, however, would not be performed by the Reserve Bank for the Central and Provincial Governments of Pakistan after 31st March, 1948, when the financial year would end.

The relations of the scheduled and non-scheduled banks in Pakistan to the Reserve Bank would continue to remain till 30th September, 1948 as they were before the partition.

The Reserve Bank of India is understood to have transferred so far to the State Bank of Pakistan gold worth Rs. 2 crores, calculated at the statutory price of Rs. 21-3-10 per tola. The other assets transferred are Sterling Securities worth Rs. 60 crores, Rupee Securities worth Rs. 24 crores, and three crores of Rupee coins. This transfer represents Pakistan's share, to date, of reserves as backing for notes in circulation.

India notes superscribed "Pakistan" amounting to Rs. 50 crores were issued by the Reserve Bank between April 1 and June 30, 1948.

The State Bank of Pakistan had encashed and remitted to the Reserve Bank, "India notes" worth about Rs. 40 crores since July 1, 1948, when it came into existence.

Indian currency ceased to be legal tender in Pakistan with effect from Sept. 30, 1948. Since then these notes have gradually been withdrawn from circulation and are being returned to India against which assets are transferred from time to time.

The liability for one-rupee notes will be shared by each Dominion. These notes are not issued by the Reserve Bank, and no assets are held against them.

This process of transferring assets to the State Bank of Pakistan will continue till June 30, 1949. By then, it is expected, all India notes will have been withdrawn from Pakistan, though some time must elapse before these are tendered to the Reserve Bank and assets claimed against them.

Of the total of 35 important banks there are only two banks with headquarters in Pakistan, with a third slowly making its appearance on the scene. All other banks have their headquarters outside Pakistan from where their policies and activities are directed.

It appears that Pakistan accounted for 13% of the Head Offices of the total number of scheduled banks in the two Dominions and for 20% of the total number of offices.

Pakistan had a bigger share in the distribution of non-scheduled banks with capital and reserves over Rs. 50,000 as about 25% of these banks were in Pakistan. Western Pakistan was provided with larger banking facilities than Eastern Pakistan, because 10 out of the 13 scheduled banks and 123 out of the 157 non-scheduled banks in Pakistan were situated in the Western Zone.

From a study of the following table, it appears that the clearance of cheques in Pakistan is rather low. Although it is due to the fewer clearing houses being located in Pakistan before the partition, the predominantly agrarian character of Pakistan's economy largely accounts for this. Since the partition, the position should have improved, following an increase in business activities in that Dominion.

ANNUAL CLEARING HOUSE RETURNS

	INDIAN UNION		PAKISTAN		Total Rs. in crores
	Rs. in crores	Percentage to total	Rs. in crores	Percentage to total	
1938-39	18,79	97	43	3	19,22
1946-47	67,82	95	3,56	5	71,68

The State Bank of Pakistan :—The State Bank of Pakistan as a central banking institution of the Dominion of Pakistan was inaugurated from 1st July, 1948.

Every scheduled bank has to maintain a balance with the State Bank, the amount of which shall not at the close of business on any day be less than five per cent. of their demand liabilities and two per cent of their time liabilities.

The State Bank controls and regulates the currency, credit and foreign exchange of Pakistan. It discounts paper and enters into the market for purchase and sale of securities. However, it does not engage in trade or influence directly any of the commercial or industrial undertakings.

The initial capital of the bank was fixed at Rs. 3,00,00,000 (about £2,100,000) and 49 per cent of the shares made available to the public, a limit of 500 shares being fixed for one person singly or jointly with other persons. Special preference was given to small investors.

The cumulative dividend to be distributed among the shareholders will not exceed four per cent. per annum. The surplus profit will be transferred to the reserve fund until this sum amounts to Rs. 3 crores, the initial share capital of the State Bank. When this target has been reached, the remaining profits will be handed over to the Central Government.

Of the eight directors, five are nominated non-officials and three are elected non-officials, nominated by the shareholders registered in Karachi, Lahore and Dacca separately.

In order that the bank should be conducted purely on scientific lines under the guidance of the best available experts and that the bank should be kept as free from political influence as possible, it has been provided that no member of the cabinet or any provincial legislature shall be eligible as Governor or director of the bank. Similarly, all Government or State officials who draw their salaries from the Government Treasury are debarred from becoming directors of the bank.

When the organisation is fully set up it will have local boards at Karachi, Dacca and Lahore to deal with local problems and to advise the central board. Each local board will consist of four members elected from amongst themselves by the shareholders registered in the area concerned and not more than five members nominated by the Central Government from amongst the shareholders registered in the area. No shareholders can be registered in more than one of the circles. In exercising the power of nomination, the Central Government will aim at securing the representation of territorial or economic interests not already represented, and in particular interests of the co-operative banks. This provision has been made so as to bring the agricultural class in touch with the central banking authorities of Pakistan.

From April 1, 1948, Pakistan issued its own coins as also notes which were inscribed with the words "Government of Pakistan". From October 1, 1948, Pakistan put into circulation currency notes of its own designs, printed in London by Messrs. Thomas De La Rue & Co., Ltd., but India coins and notes remain in the country in large quantities, and the transition has not yet been completed. The issue of paper currency is backed by gold, foreign exchange and Government securities. Pakistan is entitled to receive from the Reserve Bank of India the dominion's share of those assets equivalent to the value of India notes returned to them. The State Bank is responsible for collecting the India notes, returning them to the Reserve Bank of India and receiving in exchange from the bank gold, foreign exchange, Government securities etc. of equivalent value.

The following is a weekly statement of the State Bank of Pakistan:—

STATE BANK OF PAKISTAN

(In 000's of Rupees)

ISSUE DEPARTMENT

	Week ended 20-5-49	Week ended 13-5-49
LIABILITIES—		
Notes in Banking Department	7,41,62	5,74,06
Notes in circulation	1,70,41,88	1,71,75,16
Total notes issued ...	1,77,83,50	1,77,49,22
ASSETS—		
Gold coin and Bullion	4,20,71	4,20,71
Sterling Securities	89,06,99	89,06,99
Government of India Securities	32,57,40	32,57,40
India Notes representing assets receivable from the Reserve Bank of India	40,83,33	40,54,49
B. Rupee coin	5,25,07	5,19,63
Government of Pakistan Securities	...	...
Held with Reserve Bank of India pending transfer—		
Gold coin and Bullion	19,02	19,02
Sterling Securities	3,87,77	3,87,77
Government of India Securities	1,53,71	1,53,71
Rupee Coin	29,50	29,50
	1,77,83,50	1,77,49,22

BANKING DEPARTMENT

	Week ended 20-5-49	Week ended 13-5-49
LIABILITIES—		
Capital Paid-up	2,93,55	2,93,55
Reserve Fund	3,00,00	3,00,00
DEPOSITS—		
(a) Central Government	87,04,07	86,61,71
(b) Provincial Government	5,53,02	6,30,14
(c) Banks	18,15,21	17,54,47
(d) Others	3,45,88	3,35,64
Bills Payable	13,13	12,86
Other Liabilities	2,40,96	1,59,07
	1,22,65,82	1,21,47,44
ASSETS—		
Notes	7,41,62	5,74,05
Rupee coin:		
(a) Pakistan	1,33	1,33
Subsidiary coin:		
(a) Pakistan		
(b) India		
Government Treasury Bills	11,78,61	11,27,63
Balances Held Outside Pakistan	86,38,71	86,89,55
Loans and Advances to Government	12,00	12,00
Other Loans and Advances	...	...
Investments	16,02,06	16,32,20
Other Assets	91,49	1,10,67
	1,22,65,82	1,21,47,44

The Security Printing Press :—An agreement has been reached between the Government of Pakistan and Messrs. Thomas De La Rue Co., Ltd., for the setting up of a security printing corporation, which will print security documents such as currency notes, postal and revenue stamps. The corporation will have an authorised capital of Rs. 75,00,000. The Government will subscribe 60 per cent. of the issued capital and the company remaining 40 per cent. The Company has undertaken to provide the necessary machinery and equipment for intaglio printing of the latest designs and also of the necessary technical specifications for the business arrangement and layout of the factory.

Technical arrangements to be made will ensure that the products of this factory are equal in beauty, workmanship and security to those of any other factory in the world. The technical experts required will initially be made available by the company, but it will take immediate steps to train nationals of Pakistan for occupying positions of responsibility in the corporation. The chairman of the corporation will be appointed by the Government.

Pakistan Industrial Finance Corporation :—A Bill for the establishment of an Industrial Finance Corporation was passed by the Pakistan Parliament in December, 1948. This will help in making medium and long-term credits more readily available to industrial concerns in Pakistan. The authorised capital of the Corporation will be Rs. 3,00,00,000 divided into 60,000 fully paid-up shares of Rs. 500 each. Of these 40,000 shares shall be issued in the first instance and the remaining 20,000 may be issued from time to time. It has been provided in the Bill to increase the capital of the Corporation from time to time with the approval of the Central Government, in which case the shares also may be increased. Of the 40,000 shares, 20,000 will be subscribed by the Government of Pakistan and the remaining 19,600 are to be reserved for the public. In case of an increase in the share capital of the Corporation, the ratio between Government and public subscriptions will be the same. The various Provincial Governments, Governments of acceding states, scheduled and co-operative banks and insurance companies can also subscribe to the share capital of the Corporation. The shares of the Corporation have been guaranteed by the Central Government as to the repayment of the principal and the payment of the annual dividend. The

general superintendence and direction of the affairs and business of the Corporation shall be entrusted to a Board of Directors with the assistance of an Executive Committee and a Managing Director. On questions of policy the Board will be guided by the Central Government, and in the case of any dispute between the two, the decision of the Central Government shall be final.

CHAPTER XXI

TRANSPORT

Importance of Transport in Indian Economy :—The importance of transport in the life of a nation requires no special emphasis. Transport plays a predominantly important role in influencing the socio-economic set-up of India.

India is a vast sub-continent with differing physiognomy and climates and as such presents complicated problems in connection with the establishment of an adequate transport system, which requires a large expenditure and a high degree of technical knowledge. India's means of communication up to the middle of the nineteenth century were archaic and insufficient. The country had a few trunk roads, while the vast areas of the country were inter-connected merely by tracks cut by village carts across the country and these became unusable during the rainy season. Even the few roads, which were available were rendered unsafe by highwaymen. Excepting the Indus and the Ganges which served as commercial highways, there was no other system of water transport.

Lack of communications in India account for the isolation of villages, conservatism of the masses, immobility of labour and defective marketing systems. The ravages of famine were often accentuated by the absence of transport.

The beginning of modern communication systems in India dates from the time of Lord Dalhousie, who launched in a vigorous policy of public works. They now consist of railways, roads, waterways and air transport.

History of the Indian Railway System :—The first period of the railway history is the old Guarantee System from 1844 to 1869. Proposals for the construction of railways were mooted in 1844 by British companies under a guaranteed return by the East India Company. Accordingly, contracts were made for the construction of two small railway lines near Calcutta and Bombay with the East Indian Railway Company and the Great Indian Peninsula Railway Company respectively. In 1853, Lord Dalhousie enunciated the Government's policy towards the railways. He

urged the creation of a system of trunk lines connecting the interior of each Presidency with its principal port and connecting the different Presidencies with one another. He favoured the agency of companies under the supervision and control of the Government, instead of direct construction by the Government. Accordingly, contracts were entered into with eight companies between 1854 and 1860 for constructing and managing railways in different parts of India. A fresh stimulus to railway construction was imparted by the experience gained during the Mutiny period, when movements of troops and materials were seriously hampered, following inadequate transport. Among notable features of the contracts with the early guaranteed companies were free grant of land, a guaranteed rate of interest, ranging from 4½ to 5 per cent and payable at 22d. per rupee, utilization of half the surplus profits earned by the companies to repay the Government any sums by which they might have had previously to make good the guarantee of interest, the remainder belonging to the shareholders, reservation of certain powers of supervision and control by the Government in all matters of importance except the choice of staff and option to the Government to purchase the lines after twenty-five or fifty years on terms calculated to be the equivalent of the companies' interest therein.

This guarantee system proved undesirable in practice as it involved a large drain on the resources of the Government. The railway budget incurred a deficit of Rs. 1,66,50,000 by 1869 and it was alleged to be due principally to extravagance of companies, which lost all initiative, following the guaranteed interest which was also considered high under prevailing conditions.

The second period covers from 1869-79 and may be termed as one of State Construction and Management. As the old guarantee system proved unsatisfactory, the Government introduced important changes in railway policy. In case of some of the more important railway companies, like the Great Indian Peninsula, arrangements regarding the distribution of surplus profits were altered in order to enable the Government to claim unconditionally half the surplus profits for each half-year, the Government relinquishing the right to purchase the lines at the end of the first twentyfive years from the dates of the respective contracts. The Secretary of State decided that regarding capital for new lines the State should secure for itself the full benefit of its own credit and

of the cheaper methods of construction, etc., which it would be able to use. Accordingly, for several years after 1869, the capital expenditure was chiefly incurred directly by the Government, and no fresh contracts with guaranteed companies were made. It was decided to borrow annually amounts up to £2 million for constructing lines to be managed by the state and a new cheaper gauge, namely the metre gauge, was introduced. A vigorous programme of railway construction then followed with cheaper costs. The main difficulty however remained regarding continuous and adequate provision of funds. The Sind and Punjab lines (later known as the North-Western) were accordingly converted from metre into broad gauge for strategic reasons. The financial difficulties of the Government were enhanced by a depreciating rupee, the famines between 1874 and 1879 and the Frontier War with Afghanistan. The Famine Commission of 1880 suggested that 5,000 additional miles of railway were urgently needed and held that the country could not be immune from famines until the Indian railway mileage had aggregated 20,000. The Government thus came to the conclusion that the state alone could not find sufficient funds for stepping up railway construction and decided again to avail of the capital borrowed by private companies.

Accordingly, the new Guarantee System was inaugurated from 1879 to 1900 and the terms of contracts with the guaranteed companies were revised and improved. Among notable features of the new guarantee system were that the lines constructed by the companies were declared to be the property of the Secretary of State for India, who had the right to determine the contracts at the end of approximately twenty-five years after their respective dates, or at subsequent intervals of ten years, on repaying at par the capital provided by the companies; interest was guaranteed on the capital raised by the companies at a lower rate, the usual rate being 3½ per cent; the Government retained a great share (usually three-fifths) of the surplus profits for their own benefit.

The lines constructed under the new system by the companies were from the beginning the property of the Government, though the companies were given a certain guaranteed rate of interest on the portion of the capital invested by them and they were allowed to manage the lines. When contracts with the old guarantee companies expired, the Government in most cases exercised their right of terminating them, though the method of making use of

this right differed in several cases. Thus for example the Eastern Bengal, the Oudh and Rohilkhand and the Sind-Punjab railways were bought and transferred to state management. In cases of the East Indian and Great Indian Peninsula, the lines were acquired by the State, but were handed over again to the same companies under revised contracts for purposes of management. When contracts with the new guarantee companies terminated, arrangements were made for the continuance of management by the original companies, but the Government obtained more favourable financial conditions by various methods, *e.g.*, reduction in the companies' share of capital and the rate of interest guaranteed and provisions relating to the division of surplus profits were modified.

Meanwhile branch-line companies were formed and Indian States were also invited to undertake railway construction in their territories. The Government, however, decided in 1925 to find the necessary capital for branch and feeder lines according to the recommendations of the Acworth Committee..

The State is at present the owner of all Trunk lines and manages the same. The management of the railways, barring a few cases, was at first left to the companies, subject to Government's power to appoint a Director on the boards of the companies and Government control, which has been exercised, since 1905, through the Railway Board regarding standard of repairs, rolling stock, public safety, co-ordination of the railway systems, train services, rates and fares, etc. The contracts with companies (except one fixed for a term of twenty-five years) were terminable at the option of the Secretary of State at specified dates on payment of the companies' capital at par. Although the last of these contracts namely with the Bengal-Nagpur Railway was to terminate in 1950, the state actually took over the line from 1st October, 1944.

Several minor lines are at present the property of private companies or District Boards. In some cases, the District Boards merely guarantee the rate of interest. There are also certain Indian State lines *e.g.*, H. E. H. The Nizam's State Railway, which was a private company known as the Nizam's Guaranteed State Railway up to 1930.

The period from 1900 to 1914 saw phenomenal growth of railways in India. In 1905 the Railway Branch of the Public

Works Department was abolished and a new Railway Department was created under the Department of Commerce and Industry with the Railway Board at its head. The Board consists of a President and two Members. The Mackay Committee on Railway finance gave a fillip to the development of railways by recommending an annual capital expenditure of £12,500,000 subject to periodical revision. Although the Government could not implement in full the recommendations of the Mackay Committe substantially larger sums were spent than before on capit accounts. The Railways were also placed on a remunerative basis from 1900, up to which the state incurred a loss of Rs. 58 crores, following the construction of uneconomic line like the North-Western Railway and other lines for the relief of famines, negligent company management and high guaranteed interest rates. The Frontier lines began to pay with the development of irrigation works in Sind and Punjab, the new contracts made with guaranteed companies were favourable and the economic prosperity of the country started to swell railway profits, which crossed Rs. 103 crores by 1924. The implementation of the recommendations of the Acworth Committee and the retrenchment carried out along lines suggested by the Inchcape Committee resulted in an improved financial condition of the railways. On the capital at charge of the state, the percentage of net earnings (gross receipts minus working expenses), before deducting interest on capital at charge, varied between 2·6 per cent in 1921-2 and 7·5 per cent in 1918-19, the average rate between 1913-14 and 1938-9 being a little over 4 per cent.

The period from 1914 to 1921 saw a break-down and deterioration of railways in India due to the stress and strain of war conditions. The railway system was overworked by the heavy transport of troops and materials, while a part of the rolling stock and staff had to be taken outside to build strategic lines in Mesopotamia and elsewhere. The capital expenditure was halted by financial embarrassments of the Government and the inability of England to export requisite capital equipment. Railways were adequately depreciated but no repairs could be undertaken.

The Acworth Committee :—The state-owned East Indian Railway was managed by the East Indian Railway Company under a contract, which was due to expire in December, 1919 and

the contract was temporarily extended upto the end of 1924. In order to investigate the question of state management versus private management, the expert Committee was appointed in November, 1920, under Sir William Acworth and the committee also enquired into other questions of railway administration and finance. It was meanwhile found that the Railway Board was unable to administer railways effectively and failed to evolve satisfactory policies in regard to rates and fares.

The majority of the Acworth Committee favoured state management in India, because it was likely to provide the people with cheaper rates, impartial treatment and better facilities. As a matter of fact, at the time of the investigation by the Acworth Committee, most railways were state-owned and state-managed and the Committee merely recommended the continuation of the prevailing state of affairs. The Committee stated that "though a company investing its own money, managing its own property and judging its officials by their success in producing results in the shape of dividends usually conducts business with more enterprise, economy and flexibility than are common in business directly managed by the State, the English companies managing State Railways in India have long ceased to be companies in this sense. The property entrusted to their management is not their own and their financial stake in it is comparatively small. Such a system has never worked satisfactorily in the past and cannot be made to do so in the future. The management is only nominally entrusted to the companies, for the Government, feeling themselves to be the real owners, have left no real initiative in the hands of the companies. Important matters like the creation of appointments, etc., are largely controlled by the Government. Thus the companies cannot and do not manage the undertaking, and cannot break new ground in any direction except with the sanction of the Government. The Government do not feel an obligation to take any initiative themselves. Nor can they stir up the companies, if the latter are supine. In short, it is a system under which a progressive company is hampered by meticulous Government control over every detail of expenditure, and under which, on the other hand, the utmost wisdom on the part of the Government is not able to prevent injuries caused by the unwise and unprogressive policy of a company's board both to the revenues of the State and the economic development of the

country. As regards the proposal put forward by the Minority, that the management should be transferred from English to Indian companies, the first objection is that the Indian companies would have only a minority interest in the undertaking. The State would remain the predominant partner, appoint one-half of the directors and nominate the Chairman and so retain its control. The division of responsibility between the Government and the Board of Directors would still continue, and the executive officers, with a divided allegiance to a Board of Directors which appointed and paid them, and to the Government which stood behind the directors, could not do the best work of which they were capable. Competent business men would refuse to join the Board if they found their power limited by Government control and Government regulations, and this seems inevitable under the plan advocated by the Minority. A mere change in the domicile of the company, therefore, would not improve matters, as companies substantially independent of Government could not be formed in India, and without such independence the advantages of private enterprise could not be gained. Indian domiciled companies, again, would not be able to be of much assistance in raising the necessary funds for railway construction. The Government would always have to take the larger share of this work on themselves and they would find this task much easier under a system of State management than under company management. Company management, whatever the domicile, would be unpopular in India. From the financial, economic and political point of view money required for Indian railways should henceforward be raised in India itself as far as possible and these loans will be more readily subscribed to by the public if the Government themselves take over the management of the railways. Again, if resort to external loans is necessary, the credit of the Government of India is always an asset of inestimable value. One of the most important arguments in favour of State management in this country is generally accepted view that foreign company management has shown itself wilfully negligent of national interests. These evils would have a greater chance of being remedied under State management. Actual experience of State management in India has shown that it does not in any way compare unfavourably with company management. A serious disadvantage of the present system comes from the fact that the vested interests of the railways in the different

parts of the country control not merely the carriage of goods and passengers, but also the construction of new lines, trunk or feeder, and the connection of two or more different lines. Spheres of influence have come into existence and form an obstacle in the way of proper railway development. Under State management this evil would be avoided, and lines would be constructed as demanded by the real interests of the country. Again, under State-management, the convenience of traders and passengers would be much better attended to than is the case at present. The grievances of the public have a much greater chance of being speedily and effectively redressed under State management. The Boards of the railway companies situated in London have been generally insensible to such representations from Indian interests as happen to reach them. On the other hand, European merchants being better organised and better represented in England have been able to make their voice more easily heard. Such a state of things cannot be regarded as conducive to the rapid development of Indian commerce and industry. Control exercised from a distance of 6,000 miles is bound to be highly inconvenient, because it unduly fetters the railway executive on the spot. The system of management by Boards of Directors in London should therefore not be extended beyond the terms of the contracts." After the expiry of contracts in 1924-5 the Great Indian Peninsula and East Indian Railways were taken over by the state for direct management. The Southern Punjab Railway was purchased by the State in 1930. It is worked by the North-Western, a State-owned and State-managed railway. The B. B. & C. I. and the Assam-Bengal Railways were taken over for State management with effect from 1st January, 1942 and from 1st January, 1943, respectively. The Bengal and North-Western and Rohilkhand and Kumaon Railways were similarly taken over and amalgamated under the name of the Oudh and Tirhut Railway.

The Acworth Committee also recommended the separation of railway finances from General Budget. It was pointed out that the General Budget becomes a gamble if it depends upon railway profits which are fluctuating. Railways in turn cease to be run on a commercial basis, if they are tacked on to general finances. The Joint Committee of the Legislative which investigated into this question disapproved of this kind of separation and recommended the spending of a capital sum of Rs. 150 crores

in five years on repairing old lines, constructing new lines and providing additional amenities to third-class travel. The Assembly however accepted the principle of the separation of railway finance from the general budget in 1924, subject to a stipulated contribution by the railways to the General Budget. This contribution was settled upon the basis of one per cent on the capital at charge of commercial lines, excluding capital contributed by companies and Indian States, at the end of the penultimate financial year, plus one-fifth of the surplus profits in that year, interest on capital at charge of strategic lines and loss in working being deducted. The Legislative Assembly stipulated that if, after payment of the contribution so fixed, the amount available for transfer to the Railway Reserve should exceed Rs. 3 crores, one-third of the excess should be paid to the general revenues. This Railway Reserve was to be used to secure the payment of the annual contribution, to provide, if necessary, for arrears of depreciation and for writing down capital, and generally to strengthen the financial position of the railways. It was expected that by this arrangement the Indian taxpayer would be assured of a regular contribution in relief of taxation from his investments in railways, while the task of maintaining a continuous financial policy and of distinguishing between a temporary and permanent surplus or deficit in accounts would be immediately facilitated. The first separate railway budget under this scheme was presented to the Assembly in March, 1925.

The Wedgwood Railway Enquiry Committee :—There was serious deterioration in railway finances from 1930 to 1936 and Sir Otto Niemeyer suggested a full enquiry into railway finances for a thorough overhaul of the entire system in 1936. Accordingly, the Railway Enquiry Committee was instituted in October, 1936, to go into the question of railway administration and finance with a view to explore possibilities of effecting economies and improving efficiency. The Committee urged the need for an adequate depreciation fund and considered that a normal balance of Rs. 30 crores would not be excessive. It further recommended that the railway should build up a general reserve fund to serve as an equalisation fund for the payment of interest charges and amortization of capital. It also suggested for the improvement of relations between railways and the public through the appointment of Press Liaison Officers and a Railway

Information Officer. The Committee did not favour unwieldy amalgamations from the economic point of view.

Indian Railways during World War II :—The Indian railways carried enormous traffic during the war period and were largely expanded. Huge sums were spent on new constructions and powerful locomotives. The Railways in India suffered at this time due to lack of technical personnel, who were absorbed in military service and several branch lines were dismantled for shipment abroad.

Railway Rates Policy :—Until lately the railway rates policy was a bone of contention. It was contended that railways determined rates entirely on consideration of railway revenues and manipulated rates to encourage foreign industries at the cost of Indian enterprises. Sir Ibrahim Rahimtulla first voiced such complaints in the legislature in 1915 and several witnesses confirmed them before the Industrial and Fiscal Commissioners and the Acworth Committee. Indian businesses paid high rates on the transhipment of goods from the interior and on the export of merchandise abroad. Rates were deliberately framed to encourage traffic to and from parts, thus aiding foreign manufacturers to buy raw materials from India and to send goods to this country. This ultimately concentrated industries in port towns to the detriment of India's interests. The 'block rates' system also aroused much discontent as leading to an artificial diversion of traffic inconvenient to industry and trade. The Fiscal Commission agreed that rates were manipulated within limits set by the Railway Board by placing particular goods into particular classes. The Industrial Commission made recommendations in favour of the rating of the internal traffic as nearly as possible on a basis of equality with traffic of the same class and over similar distances to and from the ports, so as to encourage the transformation of the raw materials into the most finished state possible before export. They also recommended that consignments travelling over more than one line should be charged a single sum based on the total distance. The Fiscal Commission endorsed these recommendations and held that within the limitations laid down by their predecessors, special rates should be granted for a term of years to new industries and even to others if they could make out a proper case for special treatment. The Agricultural Com-

mission suggested a closer co-ordination between the Agricultural Departments and the railways and recommended the grant of concession rates on the transport of fertilizers, fuel, fodder, milch cattle, etc. They further suggested a re-examination of rates on raw material and transport of agricultural machinery and implements. Some of these recommendations were accepted by the Government of India in April, 1930. Agricultural implements were reclassified in order to remove anomalies. The rates for the carriage of livestock were examined and reductions made.

According to the recommendations of the Acworth Committee, a Rates Advisory Committee consisting of a President, one member representing the commercial interest and the other representing the railways, was appointed in 1926 to make investigations and recommendations to the Government on complaints of undue preference, that rates were unreasonable in themselves, complaints or disputes in respect of terminals and that railway companies did not fulfil their obligations to provide reasonable facilities to trade. The reasonableness or otherwise of any conditions as to the packing of articles specially liable to damage, or liable to cause damage and complaints in respect of conditions as to packing attached to a rate were also investigated. The Wedgewood Committee strongly recommended for the simplification of rates, which were cumbrous and illogical. Although the Wedgewood Committee simplified the procedure of the Rates Advisory Committee in 1940, it was not fully effective as it was essentially an advisory body.

Railway Advisory Committees :—Railways Advisory Committees have been formed in all railways with a view to associate the public in the management of railways, following the recommendations of the Acworth Committee.

Railway Rates Tribunal :—It was found in practice that the Railway Rates Advisory Committee could not provide a satisfactory machinery to deal with disputes in connection with rates. The Indian Parliament in consequence authorized the establishment of a Railway Rates Tribunal on 1st September, 1948, which was recommended by the Acworth Committee as far back as 1921. The Government of India established the Tribunal in 1949 as an important step in the development of its freight policy and it should go a long way towards satisfying the public that

their complaints regarding the making or giving of undue preference in rates or charges or of refusal to quote a station-to-station rate will be looked into and decided finally by an impartial authority.

The Tribunal is authorized to entertain complaints that railway administrations are exercising discrimination, quoting unreasonable rates, attaching unreasonable conditions to rates, or are unreasonably refusing to quote a fair station-to-station rate. The Tribunal alone will have the power to reclassify any commodity in a higher class, though such powers will not be exercised except on application by the Central Government. Increase or reduction in class rates, scheduled rates, terminal or other charges will be made only by the Central Government. Both the Tribunal and the Central Government will have powers to reclassify any commodity in a lower class; but the classification of a previously unclassified commodity will be done by the Central Government. The Tribunal will deal only with freight rates. The scales of charges for the carriage of passenger luggage, parcels, military traffic, railway materials and stores and demurrage charges are excluded from the jurisdiction of the Tribunal except when specific reference is made to it by the Central Government.

Rail Priorities Organisation :—It is well known that available rail transport facilities fall substantially short of demand under the present economic set-up and hence their rationing and control have become inescapable from the public point of view. The Railway Priorities Organisation, with five Regional Controllers assisted by Local Regional Advisory Committees and supervised by a Chief Controller of Priorities at the Centre working in close association with the Railway Executive and the Central Board of Transport, has done and is doing good work. The weekly meetings of the Standing Committee of the Board are of the greatest value in this connection. They ensure co-ordination between the competing claims of different Ministries of transport. What is more, they serve to keep continuous watch on movements and to detect and to remove bottlenecks in rail transport wherever they occur. The most notable decision of the Board itself was the determination of national priorities. Food movements, of course, come first and then industries. The Board decided that full transport facilities should be provided for steel, textiles and cement to start with. A programme for each quarter has

to be framed in advance of it and the Standing Committee of the Board prepares movement programmes to implement such targets. A new scheme has also been introduced by which an efficient follow-up machinery will ensure that every consignment covered by a priority order is assured of movement.

As railway traffic is a fairly good index of trade activities, the following table is interesting:—

RAILWAYS—GROSS EARNINGS, WAGON LOADINGS AND TONNAGE LIFTED*

	Gross Earnings (Lakhs of Rupees)	No. of Tons Lifted (In thousands)	No. of Wagons Loaded (In Thousands)				
			Coal and coke for the public and for Foreign Railways†	Grains and Pulses†	Oil-Seeds†	Cotton†	Total‡
	1	2	3	4	5	6	7
1945-46	2,27,45§	93,068§	1,159	612	186	131	7,519§
1946-47	2,02,25§	83,363§	1,133	630	142	126	6,851§
December 1947 ..	12,33	5,540	91	30	10	9	409
January 1948 ..	13,68	5,889	92	33	8	7	443
February " ..	13,89	5,861	88	38	7	7	444
March " ..	...	6,526¶	...	...	...	...	490¶
April " ..	...	6,103	91	39	7	7	466
May " ..	...	5,711	88	39	7	8	413
June " ..	...	5,635	82	39	7	9	397
July " ..	...	5,971	89	39	9	8	421
August " ..	...	6,039	91	36	9	6	426
September " ..	...	5,939	92	34	8	5	432
October " ..	...	6,316	100	36	10	7	441
November " ..	...	6,241	103	33	9	7	436
December " ..	...	6,567	96	38	9	9	479
January 1949 ..	...	7,172	94	39	11	9	523

* Relates to Broad and Metre-Gauges of Class I Railways. Monthly figures exclude E. P. & Assam Railways.
† Worked out from progressive figures.
‡ Including Miscellaneous smalls, Miscellaneous full wagons, and Home line Stores and materials.
§ Adjusted.
¶ Including E. P. and Assam Railways from March 1948.

Railway Research Council :—As railways occupy a place of vital importance in nation's economy, it is necessary to harness all railway resources to support and promote the economic wel-

fare of the nation. Railways touch the life of the community more intimately than perhaps any other single economic agency and their managements should therefore know as precisely as they can its changing needs in order to render effective services. To provide therefore a continuous study in relation to industry, agriculture and domestic and foreign trade, a Railway Research Council has been set up in 1949. It has also been entrusted with the task of investigating into the operation of railways and suggesting improvements and economies.

Railway Finances :—The convention relating to the separation of Railway from General finance which was adopted by a resolution of the old Central Legislative Assembly in 1924 was intended to remain in force for at least three years and was to be therefore subject to periodic revision. There was an abortive attempt by a Committee of the Assembly in 1928 to re-examine this question. For the next 15 years this attempt was not renewed. In 1943, a Railway Convention Committee which was constituted was wound up soon after it issued an interim report. In 1947 during the Budget session, a Committee of the Legislative Assembly was set up for the purpose of investigating this matter, but owing to the far-reaching political changes that followed, the Central Legislative Assembly and its Committee ceased to exist after the Budget session. It has not been possible since, in view of the far more important problems that confronted Government in quick succession, to take up this question.

The revenues and expenses of Indian railways are illustrated by the following figures:—

TRAFFIC RECEIPTS (In lakhs of rupees)

		Budget estimate 1949-50
Passenger earnings	85,40	85,09
Other coaching traffic earnings ...	17,73	18,12
Goods earnings	97,36	1,03,40
Other earnings	3,14	3,04
Suspense	87	35
TOTAL ...	2,04,50	2,10,00
Receipts of worked lines	4,12	4,15
Receipts of Indian Government lines ...	2,00,38	2,05,85

WORKING EXPENSES

	(In lakhs of rupees) Revised estimate 1948-49	Budget estimate 1949-50
Administration	19,32	22,21
Repairs and Maintenance	46,37	49,93
Operating Staff	25,45	33,64
Operation (Fuel)	24,03	24,29
Operation (other than Staff and Fuel) ...	7,75	8,65
Miscellaneous	33,26	20,54
Suspense	—32	—23
Total—Ordinary Working Expenses ...	1,55,86	1,59,03
Depreciation	11,29	11,47
Payments to worked lines	1,56	1,62

SURPLUS (*in crores*)

1948-49	15·83 (anticipated)
1949-50	9·44 (anticipated)

The surplus during 1948-49 has been distributed as follows:—

General Revenues	Rs. 7·34 crores
Railway Betterment Fund ...	Rs. ·84 crores
Railway Depreciation Reserve Fund	Rs. 7·65 crores

The 1949-50 surplus has been allocated as follows:—

General Revenues	Rs. 4·72 crores
Railways	Rs. 4·72 crores

The entire Railway share has been appropriated to the Railway Depreciation Reserve Fund.

The Railway Board :—The Railway Board has been recognised on the basis of the Acworth Committee's recommendations in order to help the Government to exercise effective control over railway administration. The reorganised Railway Board consists of a Chief Commissioner, a Financial Commissioner and three members. Instead of the Acworth Committee's recommendation of three territorial divisions with a Commissioner in charge of each, the plan of dividing the work on the basis of subjects has

been adopted. One member deals with technical subjects and another with general administration, personnel and traffic subjects, the Financial Commissioner representing the Finance Department on the Board and dealing with all financial questions. The Board is assisted by five Directors (for Civil Engineering Traffic, Finance and Establishments) who relieve the Chief Commissioner and members of routine work in order to enable them to devote their attention to large questions of railway policy, tour over the various railway systems and maintain personal touch with local Governments to a larger extent than was previously possible.

Pakistan Railways :—The following table illustrates that the partition of the country gave seven out of the nine railway systems intact to the Indian Dominion, while the remaining two, *e.g.*, the Bengal Assam Railway and the North Western Railway have been divided on the basis of location within the physical boundaries of each Dominion.

Although it is difficult to assess the financial results of the working of Pakistan lines due to the amalgamation of railway finances and general finances in the Dominion of Pakistan after partition, it may be presumed that the working of Pakistan railways is not likely to be profitable due to the strategic lines of the North Western Railway, added to the not very profitable lines of the Bengal Assam Railway.

ROUTE MILEAGE OF RAILWAYS

Indian Union	Miles	Pakistan	Miles
Sections of N. W. Rly.:		Sections of N. W. Rly:	
Commercial	1,610	Strategic	1,817
Sections of B. A. Rly:			
Broad gauge	376	Sections of B. A. Rly.:	
Meter	1,399	Broad gauge	503
Railways not affected by		Meter	999
partition	21,180	Jodhpur Hyderabad Rly. ...	319
TOTAL ...	24,565	TOTAL ...	6,748
Capital at charge: Rs. 672 crores.		Capital at charge: Rs. 136 crores.	

Importance of Road Transport in India :—The road transport occupies unique economic significance in India due to the vastness of the country and predominantly rural character of our economy. Trade, industries and agriculture depend for their development essentially upon an efficient transport system. Although there is ample scope for the extension of railways in India, it is bound to be limited by the availability of resources and capital equipment. The railway development is also not physically possible in many areas, which must be connected with modern systems of transport. The answer to this can be found by organising efficient roads in India and the scope in this direction is almost unlimited.

Road transport is likely to bring forth untold economic and social benefits. In addition to helping the railways as feeders, roads are the only effective means of improving the standard of living in the countryside. It has been recognised that improved marketing systems provide by far and large the principal remedy for improving the conditions of Indian agriculture and this cannot be done except through the network of efficient roads, which will increase the efficiency of draught animals by relieving them of unnecessary strain and hardship. Efficient roads will eliminate considerably the wear and tear of vehicles and result in large savings in time. They may help in building "garden factories" in rural surroundings. It is also argued that the concentration of industries with attendant evils of bad housing and labour problems can be effectively met by the decentralisation of industries through the arteries of roads.

History of Road Development in India :—India was lacking in good roads up to the middle of the nineteenth century. The East India Company neglected this aspect of India's economy by entrusting the charge of roads in the hands of Provincial Military Boards.

Lord William Bentinck on private initiative took up the construction of the Grand Trunk Road connecting Delhi and Calcutta with Peshawar. It was from the time of Lord Dalhousie that the Government pursued an active road policy. He created Provincial Public Works Department for the purpose in addition to the Central Public Works Department. Although, initially, the authorities encouraged the construction of roads to feed rail-

ways, trunk roads running parallel to railways were discouraged. The road development in India received fresh impetus from the times of Lord Mayo and Lord Ripon who conceded more powers to local self-government bodies.

Features of the Indian Road Systems :—There are four great trunk roads, with which most of the principal subsidiary roads are inter-linked. The most famous of the trunk roads is the ancient marching route for armies, known as the Grand Trunk Road, which stretches right across the northern part of the country from Khyber to Calcutta; the other three connect Calcutta with Madras, Madras with Bombay and Bombay with Delhi. These four main roads accounted for about 5,000 out of 95,054 miles of metalled roads in British India in 1943. Southern India is favoured regarding the number and the satisfactory character of its subsidiary roads. The most backward areas from the point of view of roads are Rajputana, Sind, parts of Punjab, Orissa and Bengal. Aridity, thin population, unbridged and unbridgeable waterways, difficulties of the ground and lack of suitable road materials are among the obstacles. Besides metalled roads there was a very large mileage of kachcha (unmetalled) roads in 'British' India (201,414 miles in 1943), which are good for motor traffic during the dry weather. India's road system even before the advent of motor transport was inadequate for her requirements. It is understood that the Government's reconstruction plans include an addition of 400,000 miles of roads. The increased traffic has normally resulted in deterioration of village and district roads. Roads maintained by local bodies are in deplorable conditions due to inefficient management and lack of resources of local bodies. Sir Kenneth Mitchell suggested that district roads should be placed in charge of expert Provincial Highway Department as local bodies are incompetent to deal with this problem and it is beyond their financial capacities to cope with the post-war development of road construction.

Although primitive methods of transport by bullock carts persist, there has been a phenomenal development of mechanised transport by automobiles, which are carrying a large volume of traffic throughout the country.

Roads in West Bengal :—With the partition of India, the construction of border roads has assumed top priority and it

is understood that the Government of West Bengal has already started work on the construction of 500 mlies of border roads. The West Bengal Government's road programme covers about 1,400 miles, including border roads and the costs of construction will be shared by the Provincial and Central Governments. It is reported that 900 miles will be constructed by machinery, while the remaining 500 miles by manual labour. The Provincial budget earmarked a sum of Rs. 31 lakhs during 1949-50 to be spent for the purchase of machineries for road construction.

Rail-Road Controversy :—Recently, the road transport has become vastly popular, and come into competition with railways. The rivalry between these two systems of transport has resulted in cutting down rates to uneconomic levels.

The controversy centering round these two systems of transport has engaged considerable attention. The railways maintain that they cannot hold their own owing to the road competition, as the road transport is placed in an unfairly privileged position. It is contended that the railways have to maintain large tracks at their own cost, while the motor vehicles do not pay full, if any at all, charge of road maintenances, which are met from public funds.

This competition between roads and railways has appeared almost in all countries, and in practice it is found that railways are gradually losing ground. In India, too, railways are gradually losing a large part of their traffic to roads, and as such the railway revenues are being affected.

How to tackle this problem of competition has been one of the foremost tasks of all governments. Since roads are found to compete effectively with railways, it can be taken for granted that in such cases roads are more efficient and economically more advantageous. Hence any remedy to eradicate the road transport by artificial measures, unrelated to economic factors, cannot be approved of, from the standpoint of a country's economic well-being. Thus we cannot support the practice of eliminating competition by virtual prohibition of road transport in India, by the system that motor vehicles in passing from one district to another have to obtain the previous permission of the district authorities concerned, which more often than not is refused. Instead, this problem of competition should be tackled along proper economic

lines. In the more advanced countries of the West, the rail-road controversy has been solved by adopting a co-ordinated transport policy along rational lines.

We have already seen that both systems of transport possess their own distinctive merits, and it is no use to set up an unholy monopoly by artificially crippling one type of transport. The remedy lies in rationalising the transport systems, as in the case of other industries. The merits of both systems should be thoroughly scrutinised, and each should be allowed to remain where it is economically paying. Road transport should be allowed to hold its own in case of short distance traffic, especially, in the carriage of fresh fruits and flowers. Railways must always be utilised for bulky goods and long distance travels.

There are many places where roads are feeders to railways. In India, especially, there are many tracts which are as yet unconnected by any railways directly, but these places are inter-connected with railways only by roads. Roads act as connecting links between those areas and railways, *e.g.*, the route to Shillong from Calcutta. Railways run up to Gauhati, and from there, we have motor vehicle route to Shillong, and this rail-cum-road transport accounts for the popularity of Shillong as a health resort. In such cases, where roads and railways are complementary, the road transport generally tends to add to railway traffic. India offers plentiful opportunities for developing this type of feeder roads. As yet in India, vast rural areas have no means of transport, and they can be easily turned into profitable economic regions if they are connected with railways through the roads, as feeders.

In addition, we may mention that India has not yet fully explored the possibilities of transport development. Both systems of transport, railways and roads, are full of great potentialities. If a rational transport policy is adopted, and the transport development is planned, both can yet be made to grow even without competing with each other. In view of the extensive areas of our country remaining without any system of modern transport, steps may be profitably taken to plan the transport development in such a way that roads and railways can progress not along competitive lines, but as complementary ones. A co-ordinated transport programme is a fundamental necessity for our country.

The Mitchell-Kirkness Report recommended for this purpose the creation of a Central Advisory Board of Communications in the provinces and Divisional Committees in the Commissioner's Divisions. This Report was the result of an inquiry, conducted during 1932-3 by a small committee of two officers, Mr. K. G. Mitchell (now knighted), Road Engineer with the Government of India, and L. H. Kirkness, Officer on Special Duty with the Railway Board, into existing road and railway competition. They suggested a more rigid control of motor transport as one of the methods of rendering this competition fair. The Road-Rail Conference, convened in 1933, in pursuance of the recommendations of the Mitchell-Kirkness Committee, adopted resolution relating to questions regarding the co-ordination of efforts between the various authorities who were responsible for the development and control of the different forms of transport in order to reduce uneconomic competition. Among others, the Conference favoured the removal of the statutory embargo on certain railways operating road motor services, the grant of monopolies of road transport services in order to develop rural services and the creation of machinery at the centre and in the provinces designed to secure the co-ordination proposed. The Railway Act was accordingly amended in September, 1933, enabling railways to run motor services in conjunction with rail transport. A Transport Advisory Council consisting of the Ministers in charge of roads in the various provinces or their representatives, with one or two Council advisers, was also formed in 1935. Its chief function was to evolve a statement of road policy which might be generally accepted by Provinces in order to co-ordinate the development of road, rail and other forms of transport. The establishment of a new Department of Communications in 1937 paved the way for the adoption of a policy of transport co-ordination in the country.

The Wedgwood Committee reported that the regulation of road transport by Provincial Governments was inadequate and that conditions were chaotic. The policy pursued by Provincial Governments encouraged an unorganised and inefficient type of road transport, which tended to cripple railways without providing a trustworthy service on the roads while the Central Government delayed the provision of an adequate road system by limiting expenditures from the road fund. India thus suffered

in consequence from inefficient railways and inadequate roads. An effective co-ordination could be brought about by operating both road and rail transports as public services. A proper regulation of the road transport is desirable from the point of view of safety and in order to protect the railways against unfair and uneconomic roads. The regulation of roads should be conducted by Provincial Governments in accordance with uniform principles, enacted by the Central Government. The Committee recommended a system of regional licensing for goods vehicles and suggested statutory provision in order that goods rates might be regulated at some future date. The same system of regulation should be applied to private lorries as to public lorries. Police control for enforcing provincial rules should be strengthened and the Provinces should aim at uniformity in the taxation of motor vehicles.

The Wedgwood Committee strongly recommended participation in road transport by railways and therefore proposed that railways should have full powers to run road services, invest money in or enter into working agreements with road transport undertakings and arrange road transport services through contractors. Railways should investigate the possibilities of passenger and road services and place their proposals regarding competitive and feeder services before Provincial Governments. The railways in India are gradually implementing these recommendations. Finally, the Committee also urged the importance of evolving voluntary co-ordination between railways and the more responsible elements in the road transport industry.

Regulation of Motor Traffic :—The Motor Vehicles Act of 1939 supersedes the earlier Act of 1914 which was found inadequate to deal with the rapid development of motor transport.

The Act aims at vesting the control of transport vehicles carrying passengers or goods for hire or otherwise in the hands of regional transport authorities constituted for specified areas within the province and constituting a provincial transport authority for the whole province for the purpose of co-ordination, hearing appeals, etc. All motor vehicles must be covered by a permit issued by the regional transport authority of an area and the holder should be required to observe certain well-recognised conditions, *e.g.*, satisfactory maintenance of the vehicle, the obser-

vance of prescribed speed limits and the avoidance of overcrowding the vehicles or overworking the drivers.

In granting permits for motor buses and taxis, the transport authorities are required to bear in mind certain general guiding principles, *viz.*, public necessity and convenience, the prevention of uneconomic competition and the suitability of the roads to bear such forms of transport. Regarding public goods traffic, the principle adopted is that while the transport of perishable goods by road over short distance should not be interfered with, long distance traffic should be left principally to railways. The necessary control over road transport is vested in Provincial Governments. It has been provided that a route-permit holder, in return for the security given to him against unreasonable competition, should maintain a regular service, *i.e.*, have the responsibility of a public utility company. Power is given to the regulating authorities to fix minimum and maximum rates for traffic on the roads.

The Act has also provided for compulsory insurance of motor vehicles in respect of third party risks. This provision came into force on 1st July, 1946.

It has been provided that motor licences should be valid throughout India, without detriment to the right of a province or State to fix its own motor taxation. Applicants for new licences are required to pass a special prescribed test.

Road Development and Co-ordination :—The phenomenal growth of motor transport in India led to the necessity of a comprehensive road programme in order to co-ordinate local programmes and evolve a common policy. Road Boards were established in Bombay, Madras, Punjab, and United Provinces. These Boards are mainly advisory, except in Punjab where the Board is also entrusted with the distribution of grant-in-aid from provincial funds. Provincial Governments at present are pursuing a policy of nationalisation of road transport, although there remain a lot to be done to make nationalised services efficient and economic.

Road Finances :—The Indian Road Development Committee was appointed in 1927 under the chairmanship of Jayakar to investigate the problems of road transport in India.

Central revenues benefit from the development of roads through larger railway receipts and customs and excise receipts from motors and motor spirit. A well-balanced scheme of motor taxation should include duty on motor spirit, vehicle taxation and licence fees for vehicles plying for hire. Proceeds of these should be spent on road development. It has been suggested that a re-classification of roads should be made in order to transfer some of the local roads to the category of arterial roads and thus reduce the burden on local bodies and enable them to devote attention to feeder roads and roads of purely local importance. The local bodies also require more liberal financial assistance from provincial funds. The implementation of the above measures would indirectly benefit village roads by the release of provincial revenues and local funds, which are now being spent on main roads to meet the requirements of motor transport. The Road Committee also favoured contributions by the railway administration towards the construction and maintenance of feeder roads. The Committee deprecated the levy of road tolls on any traffic (except tolls on bridges where a definite service is provided to replace a ferry or a bad river-crossing) as obstructive to a rapid form of road transport and causing harassment.

The Agricultural Commission suggested that the policy of road development would be much better carried out if, instead of relying solely on current revenues, loans were raised for financing road programmes. They held that in view of the quasi-permanent character of roads and the works connected with them, the annual amount required for the amortization of provincial loans raised for this purpose would not be heavy charge on the resources of a province for the upkeep of local village roads. The Road Committee suggested that the propriety of raising such loans must be decided by each local Government for itself according to circumstances. They deprecated large schemes of road expansion financed by loans, for the service of which provincial revenues might be mortgaged for long periods. They recommended that construction or reconstruction should be financed from loans, which should be for short periods. They also recommended that there should be revenue clearly in sight to cover not only the interest and sinking fund charges, but also the cost of maintaining the road when constructed and construction from loans should preferably be confined to the more permanent parts

of a project, *e.g.*, bridges, the life of which can be estimated with fair accuracy for the calculation of the sinking fund, while the cost of maintenance is small. The Road-Rail Conference of 1933 recommended that a comprehensive plan should be drawn up in order to investigate the possibility of development of both main and subsidiary roads from loan funds within the limit of the resources available for maintenance. The twelfth annual general meeting of the Indian Roads and Transport Development Association held in 1940, pleaded for a new road policy with proper financial arrangements for the provision of roads and their maintenance.

Road Policy:—The Legislative Assembly adopted a resolution for a period of five years in 1930 embodying the following recommendations of the Road Committee. The resolution aimed at ensuring some continuity in road programmes and maintaining the enhanced duty on motor spirit for a period of five years in the first instance. The proceeds of the additional duty during the same period should be allotted as a block grant for expenditure on road development to be credited to a separate road development account, the unexpended balances of which shall not lapse at the end of the financial year. The annual grant was proposed to be distributed in the following manner. The Government of India should retain ten per cent as reserve for two years ending 31st March, 1931 and the position should be reviewed thereafter. Special grants may be made from this reserve for projects beyond the resources of local Governments or schemes which concern more than one province or State, or a bridge over a river on a provincial or State boundary. Out of the remaining balance, an allotment should be made among the provinces in the ratio which the consumption of petrol in each province would bear to the total consumption in India in the preceding calendar year, the rest representing the consumption of petrol in minor provinces, administrations and Indian States which should be allowed a lump sum from the Government of India. Grants should be made to each province for expenditure on schemes which are approved by the Governor-General on the advice of the Standing Committee for Roads. A standing Committee for Roads should be constituted every year consisting of certain elected and nominated members of both the houses of the Indian Legislature, under the chairmanship of the member of the Governor-General's

Council in charge of the department, dealing with roads. This Committee should advise the Governor-General on all matters relating to roads including central research on roads and any action to be taken by the Government of India on the proceedings of the periodical road conferences. All proposals for expenditure from the annual grant or its accumulated balance should be submitted for approval to the Finance Sub-Committee, consisting of the Chairman of the Standing Committee for Roads and of its members, being also members of the Legislative Assembly.

It may be observed that a certain degree of co-ordination between the Centre and Provinces was detailed through periodical road conferences, consisting of representatives of the Government of India and local Governments. Road Engineer was also appointed by the Government of India and he acted as secretary to the Road Conference.

The share of the petrol duty available for the Road Fund was increased from 2 annas to 2½ annas per gallon with effect from 1st October, 1931 with the levy of a surcharge on petrol. The total revenue during the first five years of the Road Development Account aggregated Rs. 518 lakhs. Up to the end of March, 1944 the Fund had received about Rs. 21 crores and after transferring nearly Rs. 4 crores to the Reserve, the sum available for distribution to the Provinces, States and minor Administrations was about Rs. 16 crores, excluding Burma's share prior to separation. The total unspent balance to the credit of the Road Fund on 1st April, 1944 stood at Rs. 232·35 crores.

The first five years for which the road account was first set up expired in 1933-4. A new resolution regarding the road account was adopted by the Central Legislature in April, 1934, and this placed the account on a semi-permanent basis. It increased the reserve at the disposal of the Government of India from ten to fifteen per cent in order to enable them to deal more liberally with the less developed provinces. It provided for loans for road development and in special cases for the maintenance of roads constructed from this account or from loans as admissible charges on the account.

A new Road Resolution regarding the allocation of grants from the Road Fund to the provinces was passed in February,

1937, by the Assembly according to the recommendation of the Transport Advisory Council. Among notable changes were that the shares allotted for expenditure in the Governor's Provinces were to be retained by the Governor-General until they were actually required for expenditure in order to ensure prompt utilization of the money placed at the disposal of the provinces and the Central Government was enabled to resume the whole or any part of the sums which it might hold for expenditure in any province, if without reasonable cause the province delayed utilizing its share in the Road Fund for road development. The Governor-General was also authorised to resume the share of a province, if it failed to take such steps as he might recommend for the control of motor vehicles. This provision was criticised by provinces as amounting to unwarranted interference in their road policy by the Central Government. The Central Government however defended their action for securing a balanced system of communications. The provision allowing the use of the Road Fund for defraying charges on road loans was discontinued in view of the impending Provincial Autonomy.

Sir M. Visvesvaraya advocated the local manufacture of motor cars in India in 1936. The question was taken up by the National Planning Committee which approved of his scheme in 1938. A few Indian companies have been formed for the purpose of manufacturing automobiles in this country. At present, they have entered into contracts with foreign firms for assembling the parts of motor cars of particular brands and eventually they propose to manufacture cars in India in collaboration with foreign manufacturers.

Pakistan :—Although there is a great scope for the development of roads in Pakistan, the Government have not yet formulated their policy regarding the continuance of the Road Fund and the implementation of the scheme concerning the National Highways. Roads in Eastern Pakistan suffered severe damages during the war period and their repairs and reconstruction are urgently called for.

Inland Waterways :—Inland navigation carried a large volume of traffic in early times and many old towns like Mirzapore grew along the banks of commercial highways. Inland naviga-

tion received a set-back from the advent of railways and has always been neglected in India.

Inland navigation is inadequate in proportion to India's population and resources and in spite of physical difficulties, there remains a large scope for the proper development of this useful method of transport. There are now about 26,000 miles of navigable waterways in India and Pakistan. The Indus, Ganges, Chenab, Sutlej, Hooghly and Brahmaputra are navigable rivers for several miles above their mouths or above the heads of navigable canals traversing their deltas. Peninsular rivers are not so often navigable. At times they flow in torrents, while during some parts of the year they become merely pools, rendering navigation impossible. Owing to strong and erratic currents, the Narbada and Tapti are not suitable for navigation. Although the Mahanadi, Godavari and Krishna are navigable in their upper reaches, they do not carry large traffic. Some small rivers round the coast, creeks and back waters also provide amenities for water transport.

The question of navigable canals received attention in India from time to time. Sir Arthur Cotton prepared an ambitious scheme of navigable canals, which was put before a Parliamentary Committee in 1872. He argued that water-carriage facilities were suitable for India and less expensive than railways and possessed the additional merit that they could sometimes be combined with irrigation. The scheme was abandoned owing to the heavy expenditure it involved and also due to the opposition of railways.

There exist a few navigable canals, *e.g.*, the Ganges Canals from Hardwar to Cawnpore and the Buckingham Canal parallel to the east coast in Madras. The numerous irrigation canals are generally not suitable as waterways. The two types of canals cannot always be suitably combined together. It is not possible to maintain navigation during the season of short supply of water without detriment to navigation. Irrigation canals are usually shallow and circuitous in their course and pass through sparsely populated rural regions to serve the requirements of cultivation. Canals for navigation on the other hand, must be deep and pass through industrial and commercial centres in order to attract a sufficient volume of business. Conditions are, however, more favourable in the deltaic regions of West and East Bengal, Orissa, Sind and Madras. The construction of navigable canals either

for transport or for both transport and irrigation used to receive attention when railways were losing, but such development projects were discarded immediately after the railways became profitable undertakings.

The Industrial Commission recommended that the Government of India should take up the question and see to it that the railway and waterway administrations work together harmoniously for those parts of the country which are served by both and that the proposal of forming a Waterways Trust should receive careful consideration. Inland waterways, well planned, would relieve congestion in the railway system and serve the needs of small-scale transport. It may also be possible to adapt some of the irrigation canals to the needs of navigation. The National Planning Committee urged in 1938 the regulation, development and control of the rivers and waterways through provincial and inter-provincial commissions for the benefit of agriculture and industry. The Central Waterways Irrigation and Navigation Commission is investigating into the possibilities of extending inland navigation by means of new construction or revival of old waterways.

Marine Transport :—India was a great sea-faring country until the beginning of the nineteenth century, when the bulk of commerce in the Indian seas was carried in Indian bottoms built in India, which also possessed several passenger ships. Indian ships built in the country out of timber were considered superior to those of other countries.

The improvement in naval architecture in the West resulting in iron-built ships, beginning of mechanised sea transport, British Navigation Acts and jealousy of British merchants deprived India of this important industry and by the advent of the present century India practically possessed no mentionable tonnage nor did she occupy any place in the carrying trade.

India's place in Shipping :—Although India posssesses an extensive sea-board and a large coastwise and sea-borne trade, she occupies an insignificant place in shipping trade and industry. The following table illustrates tonnage, entries and clearances in regard to Indian ports.

Shipping—Foreign Trade*

NATIONALITY OF VESSELS

	British				Indian				Foreign				Total†			
	Entered		Cleared		Entered		Cleared		Entered		Cleared		Entered		Cleared	
	Vessels	Tons	Vessels	Tons	Vessels	Tons	Vessels	Tons	Vessels	Tons	Vessels	Tons	Vessels	Tons	Vessels	Tons
1938-39 ..	2,024	6,374,352	2,093	6,552,994	161	295,760	259	283,705	602	2,716,270	654	2,747,751	3,403	9,431,269	4,037	9,656,874
1945-46 ..	1,160	4,528,685	664	2,462,462	388	152,383	404	155,607	388	1,682,016	254	1,020,380	2,905	6,442,240	2,572	3,737,845
1946-47 ..	1,061	3,868,843	964	3,581,871	199	128,118	218	125,668	289	1,183,585	246	1,028,547	2,290	5,242,937	2,241	4,802,699
April 1948	122	445,826	107	373,528	3	7,319	6	6,209	54	216,921	38	149,527	234	674,265	214	535,341
May "	116	418,225	102	358,858	32	19,433	33	19,927	42	162,829	54	215,723	228	603,858	284	603,841
June "	127	470,376	105	369,211	28	19,413	40	24,173	51	216,972	40	156,988	225	708,209	198	551,313
July "	120	436,887	104	347,036	25	18,598	33	27,386	46	183,236	50	213,928	200	639,528	195	588,737
August "	117	430,302	101	364,942	29	10,933	33	12,093	52	212,587	42	166,569	210	654,586	199	544,620
September "	115	459,146	90	352,791	29	12,234	33	14,605	65	250,506	54	204,543	225	723,353	198	573,192
October "	91	336,026	99	343,898	29	11,890	34	15,928	58	228,598	47	192,628	223	581,105	207	555,041
November "	109	412,802	89	330,294	33	15,901	35	12,571	63	249,463	43	165,793	233	680,346	193	510,216
December "	95	351,652	111	430,805	25	11,888	34	16,559	49	180,660	54	188,847	225	548,843	259	641,382
January 1949	108	436,078	87	316,285	27	10,081	35	16,382	82	301,753	51	175,565	276	753,692	325	520,656

* Including repeated voyages of steam and sailing vessels that entered and cleared with cargoes from and to foreign countries. † Including Native craft.

It has been estimated that the share of Indians in the coasting trade amounts to only 25 per cent, and in the oceanic trade to about 4 per cent. The partial monopoly of the Indian coasting trade which is controlled by a 'Conference' of a few large British navigation companies has created a very difficult position for Indian shippers and shipowners. The Fiscal Commission pointed out the great disparities of rates between the charges on goods shipped from one Indian port to another and those on goods conveyed between India and foreign countries, thus handicapping Indian goods in transmission in comparison with goods from and to foreign countries. The Conference dominated by foreign shipping interests controls India's coasting trade and very often jeopardises the interests of indigenous concerns by means of unfair and cut-throat competition. Among notable grievances of Indian shipowners are the deferred rebate system and rate wars. The shipping companies issue a notice or circular to shippers informing them that, if at the end of a certain period, usually four or six months, they have not shipped goods by any vessels other than those of the members of the Conference, they will be credited with a sum equivalent to a certain percentage generally ten per cent, of the total freights paid on their shipments during that period. The sum thus refunded is known as deferred rebate. This system compels continued 'loyalty' of the shipper to the Conference, which is thus able to handicap seriously the indigenous enterprises. The Fiscal Commission therefore strongly recommended legislation to be undertaken on lines followed in other countries.

Besides the deferred rebate system Indian enterprises were often cripplied in the past by rate wars. Foreign companies which are old concerns and financially strong very often indulge in rate cutting, which proves fatal for comparatively new Indian enterprises. In addition, foreign insurance companies are used to classify Indian ships as second class risks, because they are run and managed by Indians, although such ships are easily recognised first class by experts in London. It is well known how Dutch lines lately reduced freights precipitately and embarrassed the Indian shipping companies.

Foreign shipping companies neglect the comfort of deck passengers on coastal ships and several committees were appointed

to investigate this question. They are also shy in training Indians for higher executive and engineering jobs in ships, which employ a large number of Indian crews.

The Indian Mercantile Marine Committee appointed in February, 1923, recommended that in order to provide for the training and future employment of officers indispensable for the formation of an Indian mercantile marine, a training ship should be established at Bombay by the Government. The Government accepted this recommendation and the Royal Indian Marine vessel 'Dufferin', refitted so as to enable her to take in cadets, is now utilised as a training ship for officers and engineers of the Indian mercantile marine. Provision should be made at colleges of engineering for training marine engineers and facilities should be provided for practical experience at sea. The coastal trade should be reserved for licensed shipping companies, which are to arrange for eventual Indianization regarding ownership and controlling interest. The question of granting navigation bounties to purely Indian shipping companies in respect of overseas trade to other countries should be favourably considered as soon as a sufficient number of trained Indian officers were available and Indian ship-owners proved efficient in managing and running coastal steamers. Calcutta should be developed as a centre of self-propelled ship-building, being most suitable owing to its vicinity to coal and steel-producing districts and the greater experience than any other centre which it commanded. The Committee also suggested that protection should be given to the industry in form of construction bounties in order to make up the difference between the minimum cost of production in India and abroad, subject to a maximum of twenty-five per cent of the price abroad. The establishment of a ship-building yard by an Indian company may be aided by the Government by cheap loans and assistance in acquiring a suitable site, extension of Government and Port Trust patronage on certain terms regarding cost and legal provision that when such a suitable ship-building yard was completed and established, all ships seeking a licence on the coast should be required to have been built in India. Expert assistance from abroad for ship-building should be invoked. India should eventually establish schools and colleges for the study of naval architecture. Meanwhile colleges of engineering should provide for additional post-graduate courses in naval architecture.

The Government did not implement the above recommendations and only established the training ship "Dufferin".

It may be observed here that from time to time, several non-officials bills were moved in the Legislature to regulate shipping in Indian waters and reserve coastal traffic exclusively for Indian bottoms to encourage the development of Indian shipping, but they were not accepted by the Government, which was at that period more concerned with protecting British interest at the cost of our national industry. Among such non-official bills, Mr. Haji's bill was particularly important.

A non-official Coastal Traffic Bill was introduced in the Central Assembly by Sir A. H. Ghuznavi, in September, 1937 and it was referred to a Select Committee. The Bill as redrafted by the Select Committee in 1938, empowered the Central Government to deal with unfair competitive methods in coastal waters, after making inquiries, by fixing the minimum rates of fares and freights for the carriage of passengers and goods. The charging of rates lower than those fixed by the Central Government was made a penal offence. The Government of India opposed the Bill stating that it was unnecessary and impracticable. They were however prepared to regulate coastal shipping within limits. It was proposed to repeal the old Act of 1850, which threw the coastal waters of India open to the shipping of all nations and then to regulate coastal shipping. This was designed against the increased intrusion of Japanese and German shipping in the coastal trade of India.

The Reconstruction Policy Sub-Committee on Shipping appointed by the Government of India submitted its Report in April, 1947. The Committee pleaded for a vigorous national policy of shipping and recommended a tonnage target of 2 million gross tons of shipping to be achieved by about 1954, in order to obtain for Indian shipping the entire coastal trade, 75 per cent each of India's trade with Burma and Ceylon, 50 per cent of India's distant trade and 30 per cent of the trade lost by the Axis powers in the East.

The Committee proposed the establishment of a Shipping Board. The Board will be empowered to issue licences to companies plying in coastal waters and to control unfair competition. It will also advise Government on the nature of state aid to be granted to Indian shipping and the nature of Government control to be applied to companies receiving such aid.

Analysis of the Indian Shipping Industry :—The prospect of the Indian shipping industry brightened up with the advent of Independence. The scope of a prosperous shipping industry is vast in India, with her extensive sea lanes and huge foreign trade. The present Indian tonnage in commission is about 342,000 tons gross, while that under construction is about 30,000 tons gross, while it has been aimed to reach a target of 2 million tons within the next five years.

The value of a full-fledged mercantile marine in India under the present economic set-up can never be exaggerated and its absence has been easily an element of weakness of our economic system. In addition to providing a vast field of employment, a developed mercantile marine will add substantially to our national dividend and prove to be a rich source of earning foreign exchange. At present India pays heavily to foreign countries by way of freights. The value of a mercantile marine as a naval auxiliary and a second line of defence in times of war is universally recognised and as India has now laid the foundation of her own navy she cannot afford to neglect this aspect of the question.

It should however be remembered that the Indian shipping industry left to itself will not be able to grow according to our anticipations. A vigorous state policy is urgently called for in this regard. Apart from the strategic and defence points of view, a shipping industry from inherent economic reasons requires substantial state aid to grow in its initial stages. It requires a large capital outlay, which is to be locked up for a fairly long period without yielding attractive returns and so a large amount of private capital is not likely to be available for developing this industry under present economic conditions in India. The state must therefore step in to aid the Indian shipping industry during the initial period. It is therefore gratifying to observe that the Government of India have declared to support the Indian shipping industry in a very active way. The Government proposes to step up the tonnage by starting three Shipping Corporations, which will be semi-state concerns and managed by private companies under the control and supervision of the Government. The capital of these Corporations will be subscribed partly by the Government and partly by private companies, which will be entrusted with management. The first Corporation of this kind is likely to start functioning at an early date. It will be

managed by the Scindia Steam Navigation Company. The Corporation will be started with a capital of Rs. 10 crores. Of this amount 51 per cent would be intially taken up by the Government with a view to inspire greater confidence in the public investors in the ultimate success of this joint shipping venture. The Government have provided the much-needed incentive, namely, that in case the Corporation incurred any losses within the first five years of its working, they would be made good by the Government.

There are other favourable circumstances for the development of the Indian shipping industry. At present, the Government imports large quantities of food grains, steel, rail, cement, machinery, wagons, etc. If the Government were to follow the lead of the U.S. Government in regard to carriage by American ships at least to the extent of 50% of Government-owned or controlled cargo, they would not only enable Indian shipping to take great strides but would also ensure its comparative economic operation. The Government in addition should adopt active steps to eliminate unfair competition in India's coasting trade. Besides, if the Government were to use their good offices for securing entry of Indian shipping into the different Conferences and if they were to take prompt and effective steps to promote co-ordination among all their Ministries to enable Indian shipping to carry as large a quantity of Government cargo as possible, there was ample scope both for private enterprise and joint venture to cover the field on economic lines. As we have a National Government, dedicated to the task of enhancing the economic welfare of the Indian masses, we may confidently hope that the above measures will be fully implemented in practice. The history of the shipping industries of Japan, United States and Germany fully illustrates an active participation of the state. Even England's maritime greatness is often attributed in part to the protection derived from the Navigation Acts, which were in operation for about two centuries before they were repealed towards the middle of the last century. The Government of India should see that the Indian shipping industry does not again become the cinderella of the joint shipping family.

The development of an Indian mercantile marine is closely linked up with a proper ship-building industry. Although the ship-building yard at Vizagapatam is constructing ships of quality and design, the progress is rather slow. As a vast enterprise of this kind requires a huge capital and highly technical personnel, it

offers a suitable field for state enterprise and the recent move of the Government of India for taking over the ship-yard at Vizagapatam will be generally welcomed.

The development of India's harbours and ports on modern scientific lines is likely to help the expansion of India's coastal and foreign trades. The Government's port development plans are therefore likely to be of great value to the country. The main features of the port development plans are a Rs. 8,50,00,000-scheme for the expansion of Calcutta's docks, remodelling of marshalling yards, construction of road and railway links, installation of new bridges and lock gates, modernization of workshops and building of staff quarters. It is hoped to increase the tonnage handled by about two millions.

Bombay's Rs. 10,00,00,000-project includes the construction of new ferry berths, new entrance locks and a dry dock, installation of new electric and hydraulic cranes, building of new wharves and warehouses, improvements to road communications and lengthening of Ballard Pier. The port will be able to handle an additional two millions tons of cargo with the implementation of this scheme.

The Rs. 4,50,00,000-project for Madras includes the expansion of the harbour to a distance of about 1,000 yards and the construction of new warehouses and marshalling yards. The port is expected to handle an additional one million tons of cargo.

The Cochin harbour expansion scheme to handle an additional tonnage of $\frac{3}{4}$ million tons is to cost Rs. 80,00,000.

Directorate-General of Shipping :—The Government of India have decided to set up a Directorate-General of Shipping under the Ministry of Commerce. The new organization will have its headquarters in Bombay, which has been chosen for easy contact with shipping interests.

The Directorate-General is expected to become the sole authority dealing with shipping matters. It will absorb various Government organizations such as the Mercantile Marine Department, Office of the Controller of Shipping, the Lighthouse Department, the Directorate of Seamen's Welfare and the Office of the Nautical Adviser and Chief Surveyor. It will initiate plans and proposals for the Government's consideration. The Government's decision to set up the Directorate-General, which has been endorsed by the Economy Committee, will divest the Commerce Ministry of

much administrative work and enable it to concentrate on shipping policy and legislative measures.

Pakistani Water Transport :—Pakistan has an extensive overseas trade, as it is rich in valuable cash crops like jute and cotton and has good exportable surpluses of food-grains, hides and skins, raw wool, tobacco, etc. The two Pakistan zones which are not geographically contiguous are connected by sea. Until recently there was no shipping company in the territories now comprising Pakistan. With the advent of Pakistan, Karachi and Chittagong have been declared as ports of registry and ships are now being registered at these ports. There are at present two principal Pakistan shipping companies. These firms control shipping of 1,400,000 tons.

The Pakistan Government proposes to establish a Railway-River Transport Board in order to co-ordinate traffic by rail, steamer and country craft. The Eastern Bengal Railway proposes to construct a flotilla to cover rivers in Eastern Pakistan at an estimated cost of one crore of rupees.

In order to formulate a scheme for the development of the ship-building and ship-repairing industry in Pakistan, a meeting of the interests concerned will be shortly held under the Director-General of Supply and Development. The items on the agenda include the advisability of establishing four units in Pakistan—two for Karachi and one each for Naraingan] and Chittagong—to undertake the manufacture of river, coastal and harbour craft and ship-repairing work of some magnitude, provision for a modern dry dock at Karachi for repairs to ocean-going liners, a dry dock at Chittagong, a slipway at Naraingan] for small craft and fixation of a target for the ship-building industry to be fulfilled in the next five years by Government and private enterprise.

Air Transport :—Civil aviation made rapid progress after World War I. India began to take interest in civil aviation with the introduction of air mail service between Karachi and Bombay. The inauguration of French and Dutch services in India, the weekly service between England and Karachi and the Empire Mail Scheme increased interest in civil aviation in this country. India is now a party to the International Air Convention. Flying clubs have been started in India for training pilots and the Government have been taking active interest in training pilots by awarding

civil aviation scholarships. Similar scholarships are also awarded by private institutions, *e.g.*, Ratan and Dorabji Tata Trusts. The Meteorological Department has improved substantially meteorological arrangements for civil aviation.

There has been a phenomenal progress in civil aviation in India after World War II and several private enterprises have been started in this industry. Civil aviation is fast developing in India in both passenger and goods traffic and regular air services now connect almost all important towns in India. Some Indian companies are also extending their services abroad. The first external service between London and Bombay was started by an Indian company, namely, Air-India International Ltd., which was started in 1948. The service was undertaken on a joint partnership basis between the Government of India and the company, the former subscribing to 49 per cent of the capital of the company.

India has become a vital force in the modern air age, having acquired fourth place in civil aviation among the nations of the world. India today has seven civil aviation companies, operating 22,092 miles of regular internal air services, and three overseas services. The internal lines covered 13·5 million flight miles last year and carried more than 342,000 passengers. The speedy advancement of civil aviation in this country is regarded as having no parallel in the world. The Government of India have budgetted for an expenditure in 1949-50 of Rs. 2,92,00,000 for development projects under civil aviation.

India, as a member of the International Civil Aviation Organization, has to develop her aerodromes to conform to the standards laid down by it. A wide programme of construction of terminal and residential buildings, receiving stations and hangars at the international airports in India and also at other aerodromes in the country, is being undertaken.

With the rapid growth of air-transport in India, the responsibilities of the Civil Aviation Department have increased. It now has to deal with 46 civil aerodromes besides a number in Indian States. It has also to open a few additional aerodromes and man them with trained personnel. In view of the big developments in radio technique as an aid to aviation, the Government propose to spend Rs. 58 lakhs to provide radio communication facilities to aircraft in India. The Director-General of Civil Aviation is concerned with the maintenance and control at present of 46 com-

munication stations scattered all over the country. The Government of India started in 1946 a civil aviation training centre at Saharanpur with a communication school attached to it for training radio operators and technicians. More than 300 candidates have passed through this institution in the past two years.

The establishment of a flying training school at Allahabad in September, 1948, was another Government undertaking, and two batches of pilot instructors have so far completed their training at this school. Training aircraft—Chipmunks and Aero XIX—which had been ordered from abroad have begun arriving in India and the first batch of commercial pilot trainees will soon be admitted to the course. Arrangements are also being made to open an engineering school for training ground engineers and for a repair organization for the overhaul and day-to-day maintenance of training aircraft.

Rs. 15 lakhs have been set aside for payment of subsidies to flying and gliding clubs, which will assist in the training of civil aviation personnel. In the past year, flying clubs trained 179 pilots for the 'A' licence and 19 for the 'B' licence, besides having on their rolls 267 trainees on January 1st, this year.

An Aeronautical Society has been formed to promote the advancement of the profession of aeronautics in India. The Society has among its members scientists, engineers and technical personnel of the Civil Aviation Department. In spite of this rapid progress in civial aviation, Indian companies are handicapped by high operating costs and lack of technical personnel. In order to encourage the development of civil aviation, the Government has been taking active measures to see that Indian air lines become profitable. It has been decided to carry all postal services by air and substantial reductions have been made in duties on aviation spirit.

The Government of India provide aerodrome facilities to these private enterprises and in order to ensure the growth of a sound air service, the Government have introduced the system of licenses.

It may be observed here that all the air services in India are controlled and guided by the State. Although the question of nationalizing them has been before the Government for some time, it has been decided to let them continue and also to help them to develop to the fullest possible extent. Barring one or two companies, all private air lines are working at a loss. In view of the importance of civil aviation in India, it is desirable that air

transport should be nationalised at an early date. It will ensure efficient service.

The Government of Pakistan is contemplating to nationalise air transport services.

The Royal Indian Air Force :—The Royal Indian Air Force was started in 1932 with a first batch of Indian cadets trained at Cranwell. It has been expanding since then and training facilities have been arranged in India. The Royal Indian Air Force is an important segment of the Indian militia and rendered meritorious services during the Hyderabad and Kashmir campaigns.

Air Transport Association :—The Air Transport Association of India has been formed by seven operating companies of India, namely, Air India, Airways India, Air Services of India, Bharat Airways, Deccan Airways, Indian National Airways, and Indian Overseas Airlines. It is stated that the Association was being formed with a view to putting Indian civil aviation on a sound commercial basis, and to establish, by mutual consultation and co-operation, an efficient transport service without involving the companies in financial difficulties. The Association would also serve as a representative body of Indian air operators to advise the Government regarding civil aviation problems. The Association should aim at making the aviation system of the country efficient and economical.

CHAPTER XXII

TRADE AND TRADE AGREEMENTS

The Foreign Trade of India

Early History of India's Foreign Trade:—India had foreign trade connections in ancient times and once she had extensive trade with Babylon. It is stated that Egyptian mummies were wrapped in fine muslins of India. The muslins of Dacca were very popular with Greeks under the name of Gangetika. Rome in early days used to consume large quantities of Indian manufactures. There is concrete historical data, which shows that India used to command a flourishing trade with Persia, Arabia and China. During those days, India presumably exported more than she imported from foreign countries and this in consequence swelled India's stock of precious metals and she obtained the notoriety of being a "sink of precious metals". That India possessed a mercantile marine of importance in early times is illustrated by her extensive entrepôt trade, mainly in silk and porcelain imported from China, precious stones from the Indian Archipelago and pearls from Ceylon.

Although the foreign trade of India received a set-back during the eleventh century with the beginning of the Muslim rule, following unsettled conditions, the Moslems were instrumental in opening India's trade along the frontier land routes from Lahore to Kabul and from Multan to Kandahar.

Hitherto the trade with Europe passed on the Indian Ocean up to Aden, which unloaded goods in the Gulf of Suez and then they were transported to Europe by land or water. Italian merchants were principal distributors of Indian goods throughout Europe. Among others, calicoes, woollen and silk goods, jewelleries, etc., were principal items of exports and the East India Company subsequently monopolised the entire foreign trade of India. Further impetus to India's trade with Europe was given by the discovery of direct sea route from Europe to India *via* the Cape of Good Hope towards the end of the fifteenth century. By the beginning of the seventeenth century, Indian goods were extremely

popular in European markets and by the end of the seventeenth century, Indian goods began to be resisted by deliberate measures of prohibition. Indian textiles were heavily taxed in England by import duties. The East India Company which possessed a flourishing foreign trade in Indian manufactures changed her items of foreign trade completely by the end of the eighteenth century, when Indian industries were deliberately crippled and India was converted into an exporter of raw materials. India began to import largely textiles and sugar which were hitherto exported and export raw materials to be used in the manufacturing industries of the West.

From 1864 to 1914 :—This period saw a phenomenal expansion of India's foreign trade, which reached the peak in the five years, prior to World War I presumably due to organised efforts by Japan, Germany and United States to participate largely in Indian trade.

Exports showed a rising tendency up to 1873, following the American Civil War, which made an unprecedented demand upon Indian cotton. There was a lull between 1873 and 1900, following fluctuations in the rupee exchange and continued famines and pestilence in the country. There was again an upward swing in foreign trade from 1905 after the stabilisation of the rupee at 1*s*. 4*d*., which favoured India's trade with gold standard countries, but Japan and China lost a good deal of the trade with India.

The opening of the Suez Canal directly linking India and the West by sea routes marks a landmark in India's foreign trade. Among others which contributed to the expansion of trade, internal security, improved means of communications, the laying of submarine cables between Bombay and Suez rank pre-eminent. Trade with India was further accelerated by the adoption of a full-fledged free trade code and by 1883 nearly all import duties were eliminated. During this period, England easily occupied the premier position in India's trade. Although the East India Company's monopoly was abolished in 1873 by giving all nations equal opportunities, England was securely entrenched in India's trade due to large British investments in Indian railways and business and the political power being concentrated in British hands. The British supremacy in this trade began to be challenged from the end of the nineteenth century, when Germany and

Japan were determined to sell their manufactures in the Indian market. They established their own agency houses, banks and Consulates in this country. The United States up to the World War I did not take active measures to participate directly in the Indian trade and did this part of their trade through England.

Foreign Trade from 1914 to 1918 :—An outstanding feature of the foreign trade during this period was a rise in the exports of Indian manufactures from 22·4 per cent to 36·6 per cent of the total foreign trade, due to the war demand for Indian goods abroad.

The following table illustrates how the total trade volume received a set-back during this period, owing to the cessation of trade with enemy countries. Lack of tonnage and sharp rises in freights impeded trade to a large extent. Trade was also subjected to several restrictions in order to prevent the flow of goods from India to belligerents. Imports in India suffered a sharp decline owing to the preoccupation of the normally importing countries with war, but a part of the import gap was filled up by Japan and the United States, who availed of this opportunity of capturing the Indian market as far as practicable. Unstable exchanges and insecure sea lanes were also responsible for the shrinkage in the overall trade, as illustrated by the following table:—

VALUE OF OVERSEAS TRADE (IN MILLION £)

	1913-14	1914-15	1915-16	1916-17	1917-18	1918-19
Imports ...	127·5	95·6	73·1	62·8	51·9	46·9
Exports ...	166	119	129·1	140·9	130·6	113·5

India's Foreign Trade from 1918 to 1939:—A trade boom followed the cessation of hostilities in 1918 and the pent-up war demand reflected itself in the increased volume of trade. The resumption of trade with enemy countries and the demand of the European countries for recognising their industries contributed to the expansion of India's foreign trade. The boom was however short-lived and soon followed by a depression, which set in from 1920. The export trade was severely affected. The markets of England, United States and Japan were glutted with Indian goods and the Central European countries were unable to

buy owing to war damages. The famines in 1920 resulted in an embargo on exports of foodstuffs. The fixing of the rupee ratio at 2*s*. further weakened the export trade. The import trade however disclosed a contrary trend and large imports of capital goods were made in India. The high rupee ratio gave an additional fillip to imports and India in consequence had an unfavourable balance of trade to the extent of Rs. 79·80 crores in 1920-21 and Rs. 33·94 crores in 1921-22.

Recovery from this trade set-back began to be felt from 1922-23, following the stabilisation of European currencies, the restoration of the credit position of Central Europe and the settlement of reparations questions by the Dawes Scheme in 1924.

Then India was involved in the welter of the Economic Depression, which set in from 1929, following the Wall Street Crash. Among other contributory causes of this economic holocaust, the over-production of goods in both raw materials and manufactures, the monetary chaos due to the concentration of gold in America and France, compelling other countries to go off the gold standard and the political upheavals in the East and South America are significantly recognised. The international trade was further impeded by currency and exchange instabilities, restrictions on trade by customs, quotas, exchange controls, etc., and the growth of nationalism. The export trade of India consisting chiefly of agricultural commodities experienced sharp reverses, as prices of these goods were more severely depressed than those of manufactures. India's import trade declined due to the reduced consuming powers of the masses, the political unrest in the country and the policy of discriminate protection extended to cotton and sugar industries.

The Economic Depression appeared to have spent itself out by the end of 1933, which witnessed the beginning of a revival. There was a definite recovery in prices throughout the world by 1936, owing to the devaluation of currencies of several countries. Although internal trade from now onwards began to be regulated particularly by means of bilateral trade agreements, it tended to rise from this time and India participated in the world's recovery. India's export trade showed considerable gains and by 1936-37, India's favourable balance of trade which dropped to Rs. 3 crores in 1932-33 rose to Rs. 78 crores.

The period from middle of 1937 to the end of 1938 witnessed a recession in world business and in consequence the total volume of India's foreign trade showed a decline. The export trade of India suffered owing to sharp declines in prices of agricultural commodities. The Sino-Japanese war hit the Indian export trade hard because Japan reduced her offtake of Indian cotton. Imports in India also shrank due to the reduced purchasing power in the country. This business recession came to an end by the beginning of 1939, when there was a revival and a rise in price levels throughout the world was witnessed. It was brought about by expansionist monetary policies, large public works and armaments programme, undertaken by several countries.

India's Foreign Trade from 1939 :—There was a great dislocation in the foreign trade of India with the outbreak of World War II in September, 1939 and both exports and imports decreased.

With the rapid extension of the war to almost the whole of Europe, India lost a big market and a large source of supply. Although she carried on a certain volume of trade with Russia, it was extremely limited. She even could not trade with neutral countries of Europe owing to difficulties of communications and restrictions. The freezing of Japanese assets in India in July, 1941 dislocated Indo-Japanese trade and subsequently the conquests of Japan lost the markets of Indo-China, Thailand, East Indies, Malaya and Burma to India. The Indo-Chinese trade was hampered by the blockade of the Burma road to China. The countries with which India could trade were United Kingdom, United States, Canada, Australia, other European countries and countries of Middle and Near East. The diversion of the Indo-European trade round the Cape, following Italy's entry into the war, lack of shipping space, high freights and insurance charges and the unsafe Pacific routes following Japan's entry into war impeded India's trade with allied countries. In addition to these difficulties, the foreign trade of India was hampered by a net-work of restrictions, imposed by almost all countries including India. Export licences were issued for some articles by the Department of Supply and for others by the Export Trade Controller. Restrictions were also imposed on imports of as many as 68 items in May, 1940 with a view to conserving foreign exchange and lessening the pressure on the limited shipping available. Most

of these were luxury goods, including commodities of every day use and the restrictions incidentally stimulated many small and struggling industries to manufacture substitute or alternative goods.

At the same time it should be remembered that the war gave certain opportunities to India. The preoccupation of the United Kingdom and other allied countries with the production of war-materials and the drain on their man-power increased their demand from India for several raw materials, foodstuffs and manufactured articles. Besides, their inability to produce for export markets and the withdrawal of European supplies from Asiatic and African countries created a vacuum in the Near and Middle East, leading to a further rise in the demand for Indian wares. The scarcity of shipping space increased the tendency to rely on nearer markets. India tried to capture these export markets for her own merchandise.

In order to expand her exports, the Government of India sent Dr. T. E. Gregory and Sir David Meek in July, 1940, to the United States to explore the possibilities of trade with India. They submitted their report in January, 1941 and frankly admitted that it was not possible for India to find in the United States an effective substitute market for the entire lost European markets. Most of India's former exports to Europe, notably jute, groundnuts, cotton, oilcakes, wheat, raw hides and skins, could not be shipped in bulk to the United States. The growth of inter-American trade promoted at the Havana Pan-American Conference to offset Axis ambitions in South America was also a handicap to the growth of India's export trade. South American raw materials, *e.g.*, Argentine linseed, groundnuts, oilcakes, and seeds, competed directly with India's products. Although the American market for finished and semi-finished goods has possibilities, it is a fickle and strenuous market and calls for vigilance, initiative, personal contacts, and publicity campaigns. The Report observed that publicity must be encouraged even to retain the existing markets, particularly for jute, which has to reckon with increasing competition of substitutes. It strongly suggested to expand the Indo-British trade as far as possible and also stimulate exports to non-Commonwealth countries like China, Arabia and Africa. The loss of markets made inaccessible by war was partly compensated for by inter-Commonwealth trade and partly by trade

with a few non-Commonwealth countries, *e.g.*, increased exports of cotton piece-goods to Africa, Arabia, etc.

The Government set up the Export Advisory Council in May, 1940 with the Commerce Member as Chairman and twenty-one other members representing different trades and industries. Its chief functions were to discuss export difficulties, make recommendations relating to the expansion of exports of stables and discovery of alternative markets, promote the expansion of Indian manufactures and investigate facilities which could be afforded to unofficial trade delegations from India to countries overseas.

Analysis of India's Foreign Trade up to End of World War II :—The following two tables are important in analysing the foreign trade position up to the end of World War II.

TABLE I

VALUE OF INDIA'S SEA-BORNE TRADE

(in crores of rupees)

Year	Imports	Exports (including re-exports)	Total	Balance of trade
1938-9	169	152	321	+17
1943-4	210	119	329	+91
1944-5	228	201	429	+27

TABLE II

	1938-9	1943-4	1944-5
	Rs. crores	Rs. crores	Rs. crores
IMPORTS			
Food	24,00	7,08	1885
Raw materials	38,18	64,08	117,26
Manufactured articles ...	92,79	44,95	62,47
EXPORTS			
Food	39,43	47,79	49,83
Raw materials	76,28	53,70	58,19
Manufactured articles ...	50,72	106,08	116,27

A surplus of exports over imports of private merchandise was an outstanding feature during the period under review. The bulk of India's exports consisted mainly of raw materials and only from 1914-18, the proportion of exports of manufactures to total exports disclosed an increase and this process was further accelerated after World War II, indicating the increased industrialisation of the country. Imports normally consisted of a variety of articles, while exports were composed of a few important articles, *e.g.*, raw cotton, jute, oil-seeds and food grains. Great Britain held a predominant place in India's foreign trade and on the import side she easily occupied the premier place, while although she was a large buyer of Indian goods, our exports were evenly distributed among a few countries. Great Britain held an undisputed sway in our foreign trade up to the end of the nineteenth century, after which her supremacy was challenged by Japan and Germany and later by the United States of America.

Except for 1920-22 India had normally a favourable balance of trade, which was equated by the importation of precious metals and by the payments of interest and Home Charges. The amount of favourable balance showed a mild recession after the separation of Burma from India on 1st April, 1937. The following table illustrates the trade balance position.

FAVOURABLE BALANCE OF TRADE

(In crores of Rs.)

1938-39	17½
1939-40	48
1941-42	107·9
1942-43	91·94
1943-44	86·17
1944-45	50·65

If we take into account the war purchases made by the United Kingdom Government in India, the favourable position of India would show further improvement.

India was often stated to be a sink of precious metals and it is therefore gratifying to observe that there was a reversal of this trend from 1931, when India began to export gold. The following table illustrates the export of gold from India.

EXPORT OF GOLD

(In crores of Rs.)

1931-32	...	...	...	58
32-33	...	...	...	65½
33-34	...	...	...	57
34-35	...	...	...	52½
35-36	...	...	...	37⅓
36-37	...	...	...	28
37-38	...	...	...	16⅓
38-39	...	...	...	13
39-40	...	...	...	34⅔

India imported silver to the value of Rs. 1·75 crores in 1938-39 and Rs. 4·74 crores in 1939-40.

Balance of Payments Position Up to End of World War II :—In assessing the real balance of payments, we have to consider all invisible items, which enter into trade. In analysing the balance of payments, the following items are considered.

Regarding exports and imports of merchandise, India occupied a creditor's position. In matters of treasure India was a debtor until 1930-31 and was converted into a creditor thereafter owing to large exports of gold. At the time of receiving a loan, a country becomes a creditor and as India received large foreign loans she was a creditor in that respect. At the time of paying interest, the position is reversed and India was a debtor in this way, having to pay interest charges on foreign loans. India was a debtor as she had to pay Home Charges, which included payments by the Indian Government to England for furlough pay, any pensions of European officers, on accounts of stores bought in Great Britain and of various expenditures incurred by the Government of United Kingdom on behalf of India. India was a creditor on account of tourist traffic as more visitors came here than the number of Indians touring abroad. India was a debtor in remitting money for students abroad. India was a debtor on account of remittances received from Indians living abroad as large sums by non-Indians were normally sent outside the country. India paid large sums abroad towards banking profits, insurance premiums and shipping freights. India received larger sums from

abroad towards charity and donations than she paid for similar purposes.

India's Home Charges brought out the "Drain Theory" which implied that India was exploited and the excess of her exports over imports of merchandise was drained by these "Home Charges" as illustrated by the table below.

GROSS STERLING EXPENDITURE IN ENGLAND

Year		Amount	Year		Amount	Year		Amount
		£			£			£
1859-60	..	5,042,945	1913-14	..	20,311,673	1928-9	..	29,744,993
1869-70	..	7,677,850	1918-19	..	23,629,495	1929-30	..	31,558,715
1879-80	..	14,543,277	1922-3	..	31,860,179	1930-1	..	31,423,147
1889-90	..	14,848,923	1924-5	..	31,888,776	1931-2	..	30,899,333
1899-1900	..	16,392,864	1926-7	..	29,507,472	1932-3	..	29,556,401
1909-10	..	19,122,916	1927-8	..	28,864,765	1933-4	..	28,862,177

It may be observed that the above table does not include payments made on account of stores bought by India in Great Britain.

Among the important items of "Home Charges", interests on foreign borrowings raised in England by the Government of India for financing railways, irrigation works, etc., ranked pre-eminent. It is rather an exaggeration to contend that the entire payment on this head constituted a drain, because the money, which was raised was spent in enhancing the economic well-being of India. Interests on foreign loans were paid in exchange of positive economic gains. It may, however, be argued that interest rates were rather high and extravagance was frequently found in railway finances. "Home Charges" excluded all interests and profits which India had to pay on foreign capital investments on private account.

India's expenditure on account of payments to non-Indian civil servants and army was very large and could not be justified by the needs of the country.

Present Position of India's Foreign Trade :—The following tables illustrate the present position of India's foreign trade.

TABLE I

Composition of Trade (Private and Government)

Lakhs of Rupees

	Food, Drink and Tobacco			Raw Materials			Manufactured Articles			Total*		
	Imports (−) 1	Exports† (+) 2	Balance 3	Imports (−) 4	Exports† (+) 5	Balance 6	Imports (−) 7	Exports† (+) 8	Balance 9	Imports (−) 10	Exports† (+) 11	Balance 12
April 1948 ..	4,00	6,35	+ 2,35	6,49	13,67	+ 7,18	19,03	18,39	− 64	29,72	38,56	+ 8,84
May „ ..	13,55	4,49	− 9,06	10,09	11,10	+ 1,01	19,42	15,68	− 3,74	43,32	31,53	−11,79
June „ ..	5,46	4,54	− 92	10,81	9,87	− 94	19,34	22,28	+ 2,93	35,75	36,60	+ 1,05
July „ ..	8,79	6,69	− 2,11	9,56	8,07	− 1,49	21,83	23,77	+ 1,94	40,56	38,80	− 1,76
August „ ..	8,69	5,57	− 3,11	10,89	6,61	− 4,28	23,97	21,50	− 2,47	43,90	33,83	−10,07
September „ ..	5,78	7,56	+ 1,78	8,65	4,85	− 3,80	24,54	22,64	− 1,90	39,25	35,16	− 4,09
October „ ..	5,02	6,77	+1,75	6,56	5,16	− 1,41	23,07	20,43	− 2,63	35,13	32,51	− 2,62
November „ ..	7,06	8,71	+ 1,65	9,42	7,30	− 2,12	25,35	20,89	− 4,46	42,22	37,06	− 5,16
December „ ..	7,77	8,86	+1,09	11,75	8,02	− 3,73	25,94	18,12	− 7,82	45,95	35,20	−10,75
January 1949 ..	11,17	10,13	− 1,04	15,97	7,42	− 8,55	27,39	17,48	− 9,91	55,04	35,13	−19,91
February „ ..	9,49	10,46	+ 97	12,34	9,48	− 2,86	29,80	15,70	−14,10	52,11	35,75	−16,36
March „ ..	5,19	7,42	+ 2,23	14,34	7,00	− 7,34	34,92	17,34	−17,58	55,09	31,94	−23,15

* Including living animals and postal articles. † Including re-exports. Figures for Kutch are included from June, 1948.

TABLE II

Direction of India's Seaborne Trade*

(Government and Private)

(In Lakhs of Rupees)

	COMMONWEALTH															FOREIGN COUNTRIES		
	CEYLON			UNITED KINGDOM			CANADA			AUSTRALIA			TOTAL†			BURMA		
	Imports (−) 1	Exports (+) 2	Balance 3	Imports (−) 4	Exports (+) 5	Balance 6	Imports (−) 7	Exports (+) 8	Balance 9	Imports (−) 10	Exports (+) 11	Balance 12	Imports (−) 13	Exports (+) 14	Balance 15	Imports (−) 16	Exports (+) 17	Balance 18
1938-39	129	536	+ 407	4,872	5,837	+ 964	96	214	+ 118	245	300	+ 55	9,110	9,083	− 27	2,441	1,150	−1,291
1945-46	374	1,742	+1,368	6,793	6,953	+ 159	1,979	670	−1,309	802	1,062	+259	12,880	13,912	+1,031	77	153	+ 76
1946-47	344	1,468	+1,125	11,378	7,583	−3,795	1,493	814	− 679	1,553	1,416	−136	18,293	16,016	−2,277	545	1,267	+ 722
April 1948 ..	14	79	+ 65	1,040	759	− 282	32	119	+ 86	67	103	+ 36	1,441	1,732	+ 291	108	154	+ 46
May " ..	9	60	+ 51	943	744	− 199	75	70	− 5	315	17	−298	1,918	1,291	− 628	397	142	− 256
June " ..	18	103	+ 85	931	929	− 2	65	45	− 20	137	230	+ 94	1,652	1,722	+ 70	105	129	+ 24
July " ..	23	104	+ 82	1,099	684	− 415	75	59	− 16	332	135	−198	2,104	1,915	− 189	320	139	− 181
August " ..	35	145	+ 110	1,191	674	− 517	88	58	− 30	362	118	−244	2,209	1,989	− 220	163	66	− 98
September " ..	13	79	+ 66	1,106	801	− 305	76	92	+ 16	204	329	+125	1,853	2,032	+ 179	98	63	− 36
October " ..	24	98	+ 74	1,177	743	− 434	29	65	+ 36	41	210	+168	1,660	1,749	− 969	80	108	+ 28
November " ..	22	118	+ 96	1,353	913	− 441	30	16	− 13	125	188	+ 64	1,911	1,980	− 774	95	64	− 31
December " ..	38	99	+ 60	1,373	848	− 525	52	96	+ 44	97	221	+124	1,930	1,801	− 585	128	89	− 39
January 1949 ..	29	106	+ 77	1,592	898	− 694	64	95	+ 31	227	229	+ 2	2,540	1,955	− 129	97	61	− 37
February " ..	15	117	+ 101	1,670	1,021	− 649	118	57	− 61	126	102	− 24	2,651	1,877	+ 68	185	24	− 160
March " ..	20	119	+ 99	1,742	809	− 933	85	66	− 19	58	177	+119	2,709	1,740	+ 89	99	17	− 82

* Including re-exports. † Burma figures are included under Commonwealth upto 31-3-1948 and thereafter under Foreign countries.

	FOREIGN COUNTRIES—(contd.)															All Countries		
	U.S.A.			Egypt			Iran			China			Total†					
	Imports (−) 19	Exports (+) 20	Balance 21	Imports (−) 22	Exports (+) 23	Balance 24	Imports (−) 25	Exports (+) 26	Balance 27	Imports (−) 28	Exports (+) 29	Balance 30	Imports (−) 31	Exports (+) 32	Balance 33	Imports (−) 34	Exports (+) 35	Balance 36
1938-39	998	1,429	+ 430	221	126	− 95	357	85	− 272	173	250	+ 76	6,445	7,900	+1,455	15,555	16,983	+1,428
1945-46	9,202	7,355	−1,847	1,536	295	−1,240	4,618	179	−4,439	4	795	+791	16,353	12,727	−3,627	29,234	26,638	−2,595
1946-47	6,934	8,007	+1,073	1,426	259	−1,166	2,357	292	−2,066	422	1,333	+911	15,088	15,939	+ 850	33,382	31,955	−1,427
April 1948 ..	746	654	− 92	146	63	− 84	137	8	− 129	55	115	+ 60	1,531	2,128	+ 596	2,972	3,860	+ 887
May „ ..	985	636	− 349	132	67	− 66	263	24	− 239	4	93	+ 88	2,414	1,857	− 557	4,332	3,147	−1,185
June „ ..	890	540	− 349	262	93	− 169	223	7	− 215	6	65	+ 59	1,923	1,954	+ 32	3,575	3,676	+ 102
July „ ..	687	646	− 41	193	60	− 134	143	22	− 121	15	30	+ 15	1,952	1,962	+ 9	4,056	3,876	− 180
August „ ..	1,023	513	− 509	236	23	− 212	158	5	− 153	3	102	+ 99	2,178	1,391	− 787	4,387	3,389	−1,007
September „ ..	1,016	606	− 410	96	45	− 51	112	26	− 86	5	55	+ 50	2,071	1,483	− 588	3,924	3,515	− 409
October „ ..	610	590	− 20	114	76	− 38	123	66	− 57	4	9	+ 6	1,853	1,502	− 351	3,513	3,251	− 262
November „ ..	891	597	− 294	343	92	− 251	156	13	− 142	5	25	+ 20	2,311	1,726	+ 584	4,222	3,706	− 516
December „ ..	846	637	− 210	448	63	− 385	239	13	− 225	3	25	+ 22	2,665	1,719	− 946	4,595	3,520	−1,075
January 1949 ..	950	532	− 418	620	62	− 558	127	83	− 44	5	8	+ 4	2,964	1,558	−1,406	5,504	3,513	−1,991
February „ ..	850	630	− 220	321	22	− 298	91	43	− 47	7	16	+ 9	2,560	1,698	− 862	5,211	3,575	−1,636
March „ ..	926	479	− 447	279	7	− 272	219	3	− 216	9	24	+ 15	2,801	1,453	−1,348	5,509	3,194	−2,315

† Burma figures are included under Commonwealth upto 31-3-1948 and thereafter under Foreign countries.

TABLE III
BALANCE OF TRADE
(Private and Government)

Lakhs of Rupees

	MERCHANDISE			TREASURE					
				GOLD		SILVER			
	Imports (−) 1	Total Exports (+) 2	Balance 3	Imports (−) 4	Total Exports (+) 5	Imports (−) 6	Total Exports (+) 7	Balance of transaction in Treasure* 8	Total visible Balance of Trade* 9
1938-39	1,55,55	1,69,83	+14,28	75	13,81	2,46	78	+11,38	+25,65
1945-46	2,92,15	2,66,39	−25,76	22	50	8,07	54	− 7,26	−33,02
1946-47	3,30,21	3,20,34	− 9,86	8,17	1,52	24,26	2	−30,89	−40,75
January 1948	37,15	34,21	− 2,94	11	—	1,17	—	− 1,27	− 4,22
February "	36,44	30,34	− 6,10	—	—	—	—	...	− 6,10
March "	...	...	...	...	...	...	...	— 31	...
April "	29,73	38,56	+ 8,83	—	—	31	—	− 6	+ 8,52
May "	43,32	31,53	−11,79	—	—	6	—	− 23	−11,85
June "	35,75	36,80	+ 1,05	—	—	23	—	− 14	+ 81
July "	40,56	38,80	− 1,76	—	—	14	—	− 5	− 1,90
August "	43,90	33,83	−10,07	—	—	5	—	—	−10,12
September "	39,25	35,16	− 4,09	—	—	—	—	—	− 4,10
October "	35,13	32,51	− 2,62	—	—	—	—	—	− 2,62
November "	42,22	37,06	− 5,16	—	—	—	—	—	− 5,16
December "	45,95	35,20	−10,75	—	—	—	—	—	−10,75
January 1949	55,04	35,13	−19,91	—	—	—	—	—	−19,91
February "	52,11	35,75	−16,36	—	—	—	—	—	−16,36
March "	55,09	32,24	−22,85	—	—	—	—	—	−22,85

Note:—The foreign trade of the ports of Karachi and Chittagong are excluded from 1st and 15th August, 1947 respectively. Figures from August, 1947 to February, 1948 relate to the trade of Indian Dominion only with all foreign countries excluding Pakistan; thereafter the figures include India's trade with Pakistan also The foreign seaborne trade of Kutch has been included from the 1st June, 1948. * Excluding Currency notes.

The pattern of India's foreign trade has fundamentally changed since the division of the sub-continent in regard to both composition and direction. The partition of the country has not only reduced India's capacity to export commodities like raw jute, raw cotton and hides and skins, it has made India a substantial importer of these commodities. She is at present the largest importer of raw jute in the world. Partition had also adverse effects on our imports, particularly, so far as food grains are concerned. Our dependence on imported food grains to-day is substantially more than before partition.

Although our trade with Empire countries continues to be overwhelmingly important, India's trade with the United States of America and other foreign countries is fast increasing.

An outstanding feature of our foreign trade in recent times is a growing adverse balance of payments, which shows signs of continued deterioration, especially with hard currency areas. India in consequence is faced with an acute shortage of dollars. From January to November, 1948, India's deficit in her balance of payments with the United States of America was about Rs. 60·63 crores and is not known to have been reduced thereafter. It has been met by borrowing from the International Monetary Fund and spending freely convertible sterling. India's sterling balances have been reduced by over Rs. 600 crores since the end of World War II.

The adverse balance of trade for 1948-49 is calculated at Rs. 95·25 crores, or two and a half times greater than the deficit for 1947-48, which was Rs. 37·07 crores. Progressive decline at this annual rate would quite clearly spell ruin in a very short space of time. The total value of exports of Indian merchandise by sea to countries other than Pakistan amounted to Rs. 371 crores in 1948-49 as against Rs. 396 crores in 1947-48. The 1948-49 figures relate to the Indian Union alone, while the 1947-48 export figures include a percentage of goods of Pakistan origin. Having regard to this circumstance the decline in the total export figure is not itself unduly alarming. More serious, however, is the disclosure that the volume of exports in the post-war years has only attained to 65 per cent of the 1943 figures. Jute goods, which account for over 35 per cent of India's total earnings of foreign exchange and more than 60 per cent of her earnings of hard currencies, have lost that cheapness which created their past reputation as the

world's premier packing medium. In 1948 the U. S. A. took only 215,000 tons of jute goods against a pre-war peak figure of 291,000 tons. As the need for earning dollars is an important aspect of our export trade, the following figures of exports are interesting:—

VALUE IN CRORES OF RUPEES: QUANTITY IN '000 OF TONS

	1947 Quantity	Value	1948 Quantity	Value
June Manufactures ...	835·0	112·8	957·0	151·5
Jute Raw	269·5	24·9	235·0	25·2
Cotton Piecegoods* ...	247·2	21·4	309·3	33·4
Cotton Raw	207·4	33·9	94·9	16·8
Cotton Waste	103·0	4·9	54·0	5·4
Hides and Skins Raw ...	26·0	7·8	17·0	5·9
Hides and Skins, Tanned ...	22·4	16·4	13·7	11·5
Seeds	89·1	5·5	153·8	10·3
Lac	26·5	9·1	27·5	9·6
Mica	9·5	4·6	17·8	6·1
Manganese Ore	539·4	2·5	330 1	2·2
Groundnut oil	28·1	3·6	42·1	7·3
Linseed oil	10·4	2·1	11·4	1·9
Castor oil	18·1	2·9	18·2	3·2
Tea	172·0	51·4	159·6	55·8

* In millions of yards.

In 1948 approximately 30 per cent of India's total exports went to hard currency countries. The U. S. A. alone took about 66 per cent of this amount. Jute and Jute manufactures figured prominently, accounting for 70 per cent of the exports to "hard" areas. The position in cotton yarn and manufactures, which account for nearly 10 per cent of India's total exports, is even more disquieting and cannot be attributed to the disabilities of partition. Against a total export quota of 350 million yards of mill-made cloth during 1948-49 only 177 million yards were exported by sea to countries other than Pakistan, as compared to 442 million yards in 1944 and 437 million yards in 1945. Recent reports from Trade Commissioners show that Indian prices for certain classes of textiles are considerably higher, in some cases 20 to 40 per cent higher, than the price of cotton textiles of comparable qualities from Japan and the United States.

It thus appears that in order to correct the prevailing maladjustments in our foreign trade, it is primarily important to step up our exports in a vigorous way. Among obstacles to an expand-

ing export drive, the higher domestic demand for exportable merchandise, unsatisfactory quality of goods sent overseas and high prices rank pre-eminent. The latter appears to be the most important cause of our inability to increase our exports, especially in view of the fact that the sellers' market has yielded place to a buyers' market. The Indian price structure is showing an upward swing, while the world price level is declining. High costs are due to the cost of raw materials, the cost of transportation and the cost of Government, each of which is susceptible of substantial reduction. It should be emphasised that after partition India has become a country, whose exports consist chiefly of industrial goods and not of raw materials as before the division of the country. The future of India therefore as an exporter of industrial goods lies in becoming a low-cost country. The problem of reducing the domestic demand for exportable merchandise is likely to be fraught with difficulties. In recent years, there has been a shift in income groups and surplus money has gone into hands who are not used to saving by habit and tradition. In addition, the inflationary conditions are a deterrent to saving. In order to mop up the surplus purchasing power of the new income groups, it is necessary to evolve a suitable method of encouraging thrift and savings among these people. Regarding the quality of Indian wares, the business community should realise their responsibility in this matter and try to improve their moral standards. The Government should try to evolve suitable standards for Indian goods in collaboration with businessmen. The imposition of compulsory standards by the state is likely to meet resistance at the present stage.

Although the adverse balance of payments position may be partly remedied by restricting imports, there is little scope in this direction. India depends substantially on imports of foreign foodgrains and she requires a large amount of capital goods from abroad. A certain amount of consumer's goods must needs be imported in the prevailing context of inflationary conditions.

India's foreign trade is at present controlled and regulated. Licences are usually required in importing or exporting certain commodities and the Government regulates the issue of such licences, subject to consultation with the trades concerned through the media of the Export and Import Advisory Councils. Even in other items of trade where licences are not required, the previous

permission of the Government is required for either export or import. The underlying principle of our foreign trade controls is to secure the optimum utilisation of our foreign exchange resources, which are limited. The import trade is controlled through the mechanism of the Open General Licence. The Government in its anxiety to accelerate India's exports is fast liberalising its export policy and making strenuous efforts to step up our exports to hard currency areas.

The main features in the external financial position of the country have been the sharp decline in the sterling balances held by the Reserve Bank of India, the growing difficulty in financing imports from the hard currency areas and the emergence of Pakistan as a foreign country for currency purposes with the separation of its currency from that of India. The sterling balances which reached the peak figure of Rs. 1,733 crores at the end of 1945-46 declined by Rs. 121 crores to Rs. 1,612 crores during 1946-47. This reduction was due mainly to the large imports of food but there were also substantial imports of other goods in satisfaction of the pent up demand of the war years and a certain amount of repatriation of British capital. During 1947-48 the reduction was somewhat smaller due to the restrictive import policy which was introduced towards the close of 1947 and the balances fell by only Rs. 67 crores to Rs. 1,545 crores. Government's import policy is largely determined by the trend of the balance of payments. The aim of this policy is so to regulate trade that while it is kept at the highest possible level consistent with the needs and requirements of the country, India should not have an overall deficit in her balance of payments on current account during any particular period of time of more than the amount by which it has been agreed with the United Kingdom Government India's sterling balances should be drawn up. Upon the present agreement signed in July, 1948, it has been agreed that India's free sterling account which had a balance at the end of June, 1948 of £80 millions will be credited with an equivalent sum during the period July, 1949 to June, 1951. In pursuance of this policy and also with the immediate object of reducing the inflationary pressure in the country, import controls were relaxed during 1948, but the Government of India decided in May, 1949 to suspend Open Licence No. XI on the grounds that imports of consumer goods from soft currency areas, together with essential food imports are

aggravating the already adverse balance of trade as a necessary preliminary to a complete overhaul of import policy. The list of articles under Open General Licence No. XI is being reviewed and in the meantime as a "preliminary and precautionary" step the Licence was suspended with effect from 4th May, 1949. Since then a revised list of articles is being covered by the Open General Licence.

Foreign Trade Zones:—The Government of India is considering a novel scheme designed to augment India's export trade with the ultimate object of earning increased foreign exchange.

This envisages the establishment of three foreign trade zones in important ports, such as, Bombay, Calcutta and Madras, which it is hoped, will greatly facilitate both import and re-export trade, especially at a time when India's export trade is handicapped because of high domestic prices. Experts think that Bombay, Madras and Calcutta will fulfil the conditions necessary for selection as foreign trade zones. Such zones should be located at centres where there are crossroads of traffic and lines of transportation with other countries engaged in international trade, ample banking facilities and businessmen capable of influencing the establishment of market centres and buying habits. It is stated that when a foreign trade zone is established, synthetic and precious stones can be unloaded at such places, cut and the finished product re-exported without its being brought within the customs territory. In the same way, foreign grey cloth may be imported, dyed, printed and then re-exported. Such zones exist in Staten Island (New York), New Orleans and San Francisco and are the U.S. equivalents of the European free ports. The idea is to provide a segregated area where foreign merchandise may be unladen and warehoused without the application of customs laws. In these zones foreign goods may be mixed with domestic merchandise and manipulated but not manufactured or exhibited. Such merchandise may even be exported or brought into the customs territory on payment of proper duties. Customs guards and customs officers are provided in these zones for police and other duties. Sub-standard products can be reconditioned and standardized in these zones. India may be able to send her sub-standard products, such as, mica, shellac, manganese and other commodities where they can be processed and brought up to the level of recognized international standards until the standards set up by the Indian

Standards Institution are conformed to by Indian producers. Some of the Indian products which are re-exported to other countries for processing may be processed in these zones with advantage to India. A considerable quantity of tea is first exported to the U.K., where it is blended and then re-exported to the USA, with the result that the hard currency earned thereby is lost to India.

In 1941, New York City raised a revenue of over \$4 million from the profits of the zone there, and the treasury customs receipt from that zone amounted to \$2,888,000.

India's Entrepôt or Re-Export Trade :—India is geographically well placed and serves as a convenient distributing centre of western trade with countries of Far East. The Indian entrepôt trade is illustrated by the table given below:—

(In Rs.)

1946-47	1947-48	1948-49
21,60,83,333	7,88,38,436	7,28,73,458

The re-exports consist principally of imports of manufactured goods from the West. Hides, skins and fur skins from Iran are also re-exported. The re-export trade has been gradually disclosing a declining tendency, owing to the opening of direct trade relations amongst several countries, which hitherto used India as a distributing centre.

Coastal Trade of India :—The following tables illustrate the volume of India's coasting trade.

TABLE I

COASTING TRADE (*in thousands of rupees*)

	1918-19		1937-38		1939-40	
	Imports	Exports	Imports	Exports	Imports	Exports
Bengal ..	14,16,28	11,46,70	8,58,21	5,41,01	7,51,95	4,01,19
Orissa ..	24,33	10,67	13,24	9,24	8,01	16,66
Bombay ..	38,60,35	21,34,04	14,40,54	20,46,96	12,08,29	17,03,22
Sind ..	8,09,05	6,02,73	8,55,48	9,80,84	7,65,13	7,85,00
Madras ..	9,52,06	8,58,06	10,83,65	7,87,23	8,07,03	6,59,21
Burma ..	16,95,11	20,22,48	...	...	...	...
TOTAL ..	87,57,18	67,74,68	42,51,12	43,65,28	35,40,41	35,65,28

TABLE II

TOTAL TRADE OF EIGHT PRINCIPAL PORTS (*in lakhs of rupees*)

		1909-14 (Pre-war) Average	1914-18 (War) Average	1937-8	1938-9	1939-40
BOMBAY—						
Foreign	... ...	1,13,15	1,21,34	1,13,13	95,92	1,07,73
Coasting	... ...	32,30	37,03	37,02	35,19	30,50
	TOTAL ...	1,45,45	1,58,37	1,50,15	1,31,11	1,38,23
CALCUTTA—						
Foreign	... ...	1,41,06	1,45,10	1,29,03	1,20,25	1,57,69
Coasting	... ...	18,72	17,40	13,89	14,01	11,52
	TOTAL ...	1,59,73	1,62,50	1,42,92	1,34,26	1,69,21
RANGOON—						
Foreign	... ...	29,93	35,59	...	...	...
Coasting	... ...	19,03	25,27	...	...	...
	TOTAL ...	48,96	60,86	...	...	...
KARACHI—						
Foreign	... ...	38,87	35,59	43,48	34,59	35,24
Coasting	... ...	9,00	11,29	18,36	16,07	17,48
	TOTAL ...	47,87	46,88	61,84	50,66	52,72
MADRAS—						
Foreign	... ...	16,80	17,78	30,63	26,41	29,49
Coasting	... ...	2,81	3,37	3,41	3,22	3,04
	TOTAL ...	19,61	21,15	34,04	29,63	32,53
COCHIN—						
Foreign	... ...	2,72	2,82	11,11	10,04	12,76
Coasting	... ...	3,56	2,78	4,21	4,21	3,19
	TOTAL ...	6,28	5,60	15,32	14,25	15,95
TUTICORIN—						
Foreign	... ...	5,56	5,72	5,37	4,14	5,58
Coasting	... ...	1,67	1,83	4,67	3,52	3,97
	TOTAL ...	7,23	7,55	10,04	7,66	9,55
CHITTAGONG—						
Foreign	... ...	5,71	3,79	9,66	10,04	12,30
Coasting	... ...	1,76	3,14	74	32	26
	TOTAL ...	7,47	6,93	10,40	10,36	12,56

As India offers vast possibilities in coastal trade the Government should encourage it by launching in a vigorous programme of port development. The growth of a full-fledged Indian mercantile marine is an essential pre-requisite in this direction. The importance of coasting trade is specially significant under the present set-up when there is a heavy congestion on other forms of transport. It is recognised that a large volume of traffic at present carried on railways may be conveniently diverted along coastal routes with net economic gains to the country.

Internal Trade of India :—India is a vast country with a huge population. We have got a large agricultural production

and industries are fast expanding. Internal trade of the country in consequence is large and is likely to develop on a wider front with progress in economic prosperity. Transport is one of the essential conditions for a prosperous internal trade, which is largely handicapped due to transport bottlenecks. With the various transport development schemes being translated into practice, India's internal trade is likely to grow to huge dimensions. Already in matters of foreign trade, India occupies easily a place among the five leading countries of the world, while it is estimated that internal trade is about 15 times the foreign trade.

Although accurate statistics of inland trade are lacking, the following table gives an idea of the size of the inland trade of the country.

(In thousand maunds)

	1937-8	1938-9	1939-40	1940-41	1941-2	1942-3	1943-4
Coal and coke ...	464,286	449,854	496,513	...	..	...	...
Cotton, raw ...	19,185	19,538	20,712	20,914	20,607	17,775	15,358
Cotton piece-goods ...	11,190	11,077	11,294	12,771	11,444	10,351	11,004
Grain, pulse and flour	131,900	131,272	143,356	130,187	135,004	104,731	107,405
Hides and skins, raw	2,970	2,679	3,383	...	...	...	...
Jute, raw	32,574	31,497	32,767	28,074	25,954	18,145	16,590
Gunny bags and cloth	5,336	5,218	5,484	5,859	7,011	12,886	8,456
Iron and steel bars, sheets, girders and other commercial forms of iron ...	38,655	41,894	41,986	...	...	...	...
Oil-seeds	39,646	50,063	43,775	39,369	43,544	36,141	30,471
Sugar (including gur, rab, etc.) ...	39,485	38,076	28,949	38,866	39,080	11,691	30,007
TOTAL ...	785,227 (125)	781,168 (124)	828,219 (132)	...	—	...	...

The organisation of modern industry and commerce requires the collection and dissemination of commercial and industrial intelligence. Although the Commercial Intelligence Department of the Government of India was created in 1905, it was of little effective use until its reorganisation in 1922. The Department now forms a connecting link between the commercial public and the Government of India. It embraces two distinct classes of work namely, collection and dissemination of information bearing on overseas trade which may be of use to Indian firms and the compilation and publication of statistics of all-India importance relating to trade,

industry and so on. The Department answers trade inquiries, effects trade introductions and publishes the *Indian Trade Journal* (the weekly organ of the Department), statistics and other information of commercial value. It keeps in touch with trade developments of interest to India in the United Kingdom and in many other countries, through the medium of the various Indian Trade Commissioners. The Department of Commercial Intelligence and Statistics also works in close collaboration with the Directors of Industries and other Government Departments in India, the Indian Trade Commissioners in London and other centres, His Majesty's Trade Commissioners in India and the Dominions and Consular Officers in the various parts of the world in order to stimulate the overseas demand of Indian merchandise. The Department has now been merged in the Office of the Director of Industrial Statistics, Government of India.

In addition, various other Government Departments have now undertaken to issue statistics, covering a large ground and there are now several non-official agencies engaged in this useful work.

There are at present several important commercial organisations throughout the country and their main object is to enlighten the public with knowledge on current economic matters and indicate to Governments the correct lines of policies in regard to industry, commerce and agriculture. Among the important organisations are the Associated Chambers of Commerce of India and Chambers of Commerce established at Calcutta in 1834, Bombay 1836, Madras 1836, Cawnpore, Karachi, Lahore and other principal centres. Excepting at Bombay, the members of these associations are principally Europeans. Indian associations have grown in recent years. The Bengal National Chamber of Commerce was started in 1887, the Indian Merchants' Chamber and Bureau of Bombay 1907, the Southern India Chamber of Commerce of Madras 1909, the Indian Chamber of Commerce at Lahore 1912, the Indian Chamber of Commerce at Calcutta 1925, the Maharashtra Chamber of Commerce at Bombay 1927, the Merchants' Chamber of the United Provinces 1932, etc. The Federation of the Indian Chambers of Commerce and Industry is an influential organisation at the present time.

Indo-Pakistan Trade :—The Standstill Agreements between the two Dominions provided for the continuation of the prevailing pre-partition economic and commercial relations till 31st March,

1948. After this date, the two Dominions became absolutely foreign countries and their mutual trade began to be regulated by customs and tariffs. In order to facilitate trade and commerce, a comprehensive trade agreement was reached between the two Dominions on 26th May, 1948, of which the important terms are: —

(1) India will supply to Pakistan 21,96,000 tons of coal; 4,00,000 bales of cloth and yarn; 90,000 tons of steel, pig iron and scrap; 7,500 tons of paper and board; 1,270 tons of asbestos cement sheets; 2,500 tons of paints, enamels and varnishes; 18,00,000 tyres and tubes; adequate quantities of leather and footwear; 10,000 tons of Malabar jungle wood; 50,000 tons of jute manufactures; 2,000 tons of myrobalans; 11,00,000 lbs. of woollen and worsted goods; 20,000 tons of mustard oil; 5,000 tons of groundnut oil; 2,000 tons of toilet soap and 7,00,000 lbs. of flue-cured tobacco.

(2) Pakistan will supply to India 50,00,000 bales of jute; 6,50,000 bales of raw cotton; 1,75,000 tons of foodgrains; 1,000 tons of gypsum per day; 27,00,000 pieces of raw hides and skins, 20,00,000 maunds of rock salt; 5,000 tons of potassium nitrate and 550 heads of cattle.

(3) Unless otherwise arranged, supplies will be made through commercial channels.

(4) India would restrict the export of raw jute to 9,00,000 bales predominantly of Indian varieties, the bulk of which is not suitable for use in Indian mills and is usually exported.

(5) The agreement will last for one year, i.e., from 1st June, 1948, to 30th June, 1949.

Recently a bonding arrangement has been agreed to by the two Dominions, according to which the goods imported or exported by one Dominion can, if necessary, freely pass through a port of the other Dominion without the payment of customs duties to the Dominion to which the port belongs.

At an Inter-Dominion Conference held in April, 1949, it was decided that each Dominion will grant full rebate of excise on excisable commodities exported to the other Dominion if such rebates are given on exports of the same commodities to any other country. Further, for a period of one year from the date on which such agreement comes into force the two Governments will give such rebates on all commodities that are at present excisable or may during that period be made subject to excise duty, irrespective of whether such rebates are given on exports to other countries or

not. The rebates will become effective as early as possible on a date to be agreed upon between the two Governments and, in any case, not later than the 1st June, 1949.

The two Governments will enter into negotiations to secure that the benefits arising out of the grant of rebates are not unduly impaired by the imposition or increase of other duties, or by the imposition of unreasonable quantitative restrictions.

In view of this agreement the Pakistan Government will immediately instruct their delegation at Annecy provisionally not to proceed with the consideration of their complaint before the Contracting Parties, and as soon as the agreement is ratified Pakistan will instruct their delegation to withdraw that complaint finally.

With effect from the date on which the rebate of excise becomes effective Pakistan will withdraw their export duties on bamoo and fish exported to India, and, provided the necessary administrative arrangements can be made, India will reduce the import duty on unmanufactured tobacco from Pakistan to rates corresponding to the rates of excise duty which would be payable on similar Indian tobacco used for similar purposes, this being the position that obtains and will continue to obtain in Pakistan.

It has been reported that a Conference will be shortly held at Karachi between the two Dominions to consider the question of the extension of the Commodities Agreement, due to expire on 30th June, 1949. Although difficulties are likely to be encountered in fixing the holding limit of the money paid by India to Pakistan in payment of the imports from the latter in rupees, current sterling and blocked sterling, it is anticipated that leaders of both the Dominions will succeed in maintaining Inter-Dominion trade on an expansive basis to mutual advantages. A successful conclusion of the Commodities Agreement will pave the way for the extension of the Monetary Payments Agreement, which is also due to expire on 30th June, 1949. It should be remembered that the economies of the two Dominions are fundamentally complementary. Pakistan's trade with India is larger than her trade with any other single country. The case with India is almost similar. Although the tendency of overwhelming inter-dependence is undergoing certain changes and both countries are endeavouring to find other markets for selling and buying goods, great advantages will accrue to both countries, if they develop their trade with

each other, because in the manufacture of essential goods both possess natural advantages.

It is admitted that the free flow of goods from India into Pakistan would hamper the indigenous industry in Pakistan and some sort of discrimination regarding the import of Indian goods should be necessary. Although the idea of an exchange control between the two countries has been discounted in authoritative quarters, such a step will be suicidal to the interests of both. It will impede an otherwise natural trade. As a matter of fact, Pakistan by accepting her balance of payments in blocked resources does not stand to lose. She does not require them immediately, and if she goes slow on her development projects, she will be able to take advantage of cheaper goods, following an impending recession in business activities throughout the world.

Under the 1948 agreement now in force, Pakistan, reported to have for the 11 months ending May, 1949 a favourable balance of about 47 crores, is committed to holding up to Rs. 15 crores in Indian currency, beyond that Rs. 10 crores in current sterling, and thereafter in blocked sterling.

Both Pakistan and India are believed to have expressed the desire for revision of the present arrangement, obviously from a different angle. They want to be "reasonably" certain about the position of the balance of payments in the next 12 months before they make a decision on the extension of the existing agreement.

A point which has been emphasized by Pakistan and which may prove difficult to solve, it is revealed, is what should be done with the amount held by Pakistan in Indian currency. This has assumed considerable importance, especially as there is a slender chance of India having a favourable trade balance with Pakistan.

Pakistan's Foreign Trade :—Pakistan's foreign trade since partition has been gratifying and she closed the fiscal year 1948-49 with a net favourable balance of Rs. 72 crores. In view of the widely held supposition that Pakistan enjoys a favourable balance in respect of the whole of her foreign trade it is worth noting that her sea-borne trade in the twelve months to 31st March, 1949, revealed an unfavourable balance of Rs. 23·66 crores (imports being Rs. 109·37 crores against exports of Rs. 85·71 crores), the overall favourable balance deriving from the fact that trade over the land frontier with India resulted in a balance of Rs. 95 crores in

Pakistan's favour, thus more than counterbalancing the deficit with other countries.

The progress of Pakistan's trade with countries other than India, by months can be seen from the following table:

(In lakhs of Rupees)

Months	Imports	Exports	Balance
January, 1948	156	446	290
February	142	899	757
March	235	1,033	798
April	235	1,197	962
May	156	429	273
June	229	553	324
July	351	332	–19
August	398	524	126
September	475	421	–54
October	572	129	–443
November	571	291	–280
December	740	650	–90
Total ...	4,985	8,579	3,594

The principal countries in Pakistan's export trade with their respective values are shown in the following table:—

Country	Value (Rs. 00,000) Aug. 15th 1947 to Mar. 31st 1948	Apl. 1st 1948 to Dec. 31st 1948
Indian Union	—	9,85
U. K.	13,16	8,85
Soviet Union	4,03	3,93
U. S. A.	4,67	5,54
Spain	1,11	3,11
China	1,80	2,85
France	3,27	3,05
Hongkong	29	2,43
Italy	3,37	2,57
Belgium	4,83	2,86
Germany	13	1,29
Ceylon	35	1,10
Japan	88	97
Total ...	37,89	48,40

The principal countries of import with their respective values are shown below:

Country	Value (Rs. 00,000) Aug. 15th 1947 to Mar. 31st 1948	Apl. 1st 1948 to Dec. 31st 1948
Indian Union	—	36,24
U. K.	4,72	17,19
U. S. A.	4,00	4,91
Italy	21	2,23
Iran	2,22	1,63
China	—	2,30
Ceylon	17	1,72
Straits Settlements ...	7	1,01
Total ...	11,39	67,23

East Bengal's Seaborne Trade :—The total value of East Bengal's seaborne trade during the year 1948-49 was Rs. 52 crores. Representing twice the value recorded in the previous year, exports far exceeded imports and resulted in a favourable balance of trade amounting to about Rs. 9·5 crorés. This impressive increase reaffirms the expectation that the port of Chittagong through which at present all seaborne trade is being handled, will become one of the leading ports of Asia. An even greater increase would have been achieved had the physical facilities of the port been expanded to meet the large volume of traffic.

Total exports for 1948-49 were valued at Rs. 30·9 crores as compared with Rs. 19 crores in 1947 and total imports were Rs. 21·3 crores against Rs. 7·2 crores. Jute accounted for 80 per cent of the total value of commodities exported. The value of exports of jute through Chittagong in 1948-49 was nearly three times the value exported in the previous year. Export of tea, hides and skins via Chittagong declined from the previous year's level. The export of tea was handicapped by lack of the marketing and financial facilities that existed before partition. Many commodities move over land routes to the Indian Union for re-export or for consumption and Chittagong's statistics do not tell the complete story of the inter-Dominion trade. Regarding imports, cotton textiles represented the major portion. Other principal imports were mineral

oils, drugs and medicines and grains and pulses. Because of the heavy purchase of cotton piece goods in India, much of which was brought by land routes, imports via Chittagong were small.

Taking into account the overland movement of commodities, most of East Pakistan's trade was with India. Among the overseas countries, Britain accounted for about one-third of the total volume of trade. Exports to the U.S.A., mainly jute, were the second largest among overseas countries. Almost all of the world's principal countries were importers of East Bengal's produce. China, supplying much textile yarn, accounted for 17 per cent of total imports. Other principal suppliers were Iran, Italy, Burma, Ceylon and the U.S.A.

TRADE AGREEMENTS

Imperial Preference :—The system of Imperial Preference in order to expand and consolidate trade within the British Empire began from 1897, when Canada reduced her duties in favour of the United Kingdom against other countries. The Colonial Conference of 1902 passed resolutions, requesting all other Empire countries to follow Canada's lead. The United Kingdom did not participate in this movement towards Imperial Preference till long after, as being mainly importer of raw materials and food and exporter of manufactures, she did not think it worth while to do so. The Dominions and Colonies extensively practised this system of Imperial Preference from 1920 and there were preferential tariffs found in 26 British Colonies by 1922. Great Britain departed from the strict principle of free trade from 1915, when she granted preferential reduction in duties on certain articles and formally adopted the principle of protection from 1932 by the enactment of Import Duties Act.

India was opposed to this system of Imperial Preference from its inception. It was argued that India's imports consist largely of manufactured articles and her exports of raw materials and food-stuffs. Before 1914-18 about two-thirds of her total imports came from the British Empire, the United Kingdom alone contributing the largest share to the total imports from the British Empire. Indian exports went chiefly to foreign countries, about forty per cent of the total exports being absorbed by the British Empire. The exports to the United Kingdom amounted to about one-fourth

of the total exports. After World War I, there has been a tendency towards a gradual relative decline of the importance of the United Kingdom and the British Empire in the trade of India regarding both exports and imports. It was in consequence held that the adoption of such a principle would mean retaliatory measures by foreign countries, which provide a useful market for Indian merchandise. India's objection to the system was also inspired by politics as she always looked upon Imperial Preference as a symbol of political bondage.

The Ottawa Agreement :—At the Imperial Economic Conference held at Ottawa during July-August, 1932, a series of Trade Agreements were concluded among the countries of the Empire on the basis of reciprocal exchange of preferences and India participated in a scheme of extensive imperial preferences which she always opposed. The Indian Tariff (Ottawa Trade Agreement) Amendment Act of 1932 implemented the tariff changes necessitated by the general trade agreement entered into between the Governments of India and of the United Kingdom on 20th August, 1932. These tariff changes came into force from 1st January, 1933. A supplementary agreement regarding iron and steel was signed on 22nd September, 1933. Both the agreements were ratified by the Indian Legislative Assembly. The Indo-British Agreement which was signed on 9th January, 1935 was supplementary to the Ottawa Trade Agreement of 1932 and was to remain in force during the currency of the latter Agreement. This Agreement was, however, rejected by the Assembly.

The Ottawa Agreement was hanging fire for years. It was argued in favour of this pact that India was able to maintain a flourishing trade through this agreement at a time, when there was an all-round recession in trade. The Ottawa Pact was rather well timed. The Economic Depression of 1929 hit the Indian agriculture hard. India's agricultural commodities met serious competition in foreign markets during this period, due to the cultivation of virgin lands in Africa, South America and Asiatic Archipelago and an increase in over-all production throughout the world. Indian exports also met resistance, following economic isolationism pursued by certain foreign countries. Our exports were also adversely affected by the growth of synthetic products and policies of the United States and others to encourage the products of their own Colonies. After England went off the gold

standard in 1931, there was currency chaos throughout Europe, dislocating normal channels of trade. India therefore was faced with the alternative of choosing the United Kingdom and Empire markets, which revealed economic stability or to cast her lot with uncertainties elsewhere. Great Britain passed the Import Duties Act in 1932 and exempted certain Empire products from such duties, provided India and Dominions extended to her reciprocal advantages, which were given by the Ottawa Agreement. The Post-Ottawa results of India's foreign trade were gratifying, because both exports and imports substantially increased. It has been pointed out that this redeeming feature was not due to the tariff preferences, but followed an increased demand for Indian goods due to a revival of industrial activity in the United Kingdom. Critics further observed that while the export of articles in the preferred group increased by about 10 per cent, the export of non-preferred articles rose even higher, that is by more than 18 per cent. The expansion in the non-preferential group was due to the fact that it included articles which did not face any serious competition abroad and were therefore not included in the preferential list. The increase in the demand for cotton was chiefly due to the propaganda of the Lancashire Indian Cotton Committee. The increase in rubber was due to the restriction scheme; metals and ores to the renewed activity in the heavy industries; lac to speculative purchases by the London 'ring' which tried to create a corner in shellac and pepper.

Serious objections were raised against the Ottawa Pact. It was argued that it tended to deviate India's trade from natural channels. If the preferences decreased competition in the United Kingdom, they rendered it more severe in the important foreign markets. An analysis of the principal items of preference proved that only a few articles e.g., linseed, carpets, rugs and rice derived any positive benefit from the preference. Since the separation of Burma from India in 1937, some of the important commodities which enjoyed preference under the Ottawa Agreement, *viz.*, rice, teakwood, pig-lead, and paraffin wax, either dropped out or were considerably reduced in importance. The preference granted for some articles was really not required. Thus for example, the tea trade was set right through the Tea Restriction Scheme under which the main producers of tea, namely India, Ceylon and Java, had already come to an agreement amongst themselves. Prefer-

ence was unnecessary where the commodity in question already dominated the market in the United Kingdom, e.g., jute manufactures, goat-skins, castor-seeds, lac, myrobalans and mica. The possibility of further expansion was limited in other cases due to the presence of other Empire competitors, e.g., Australia in tanned sheep-skins; British West Africa in groundnuts; Australia and Canada in pig-lead; Ceylon in coir-mats and spices; British East Africa in coffee. In some cases, the United Kingdom market was small compared to foreign markets, e.g. in groundnuts. Regarding rice, barley and tobacco, the total exports from India were too insignificant to make it worthwhile encouraging trade in them by preference. In addition, certain articles like Indian tobacco could not benefit from preferences, because these goods were not in demand in the United Kingdom. Preferences compelled consumers in many instances to buy expensive goods instead of cheaper non-British products. The Government also sustained a loss of revenue, following the reduction in duties.

It was pointed out that as India had an expansive export trade with foreign countries, it was essential to recapture them and in order to do so, a number of bilateral trade agreements were deemed necessary, but Ottawa, replaced by the Indo-British Trade Agreement in 1939, reduced India's capacity for bargaining by tying her hands regarding a large number of commodities. India found in practice that she had hardly anything to offer to foreign countries in exchange of any concessions. It was not likely that these bilateral agreements with other countries would seriously affect India's exports to the United Kingdom, because most of our exports to the United Kingdom consisted of raw materials which British industries were interested in admitting free of duty. Besides, England being our creditor was interested in India's maintaining a high level of exports either to herself or elsewhere, because India could only pay her obligations to England by the surplus of her exports over imports. It was therefore argued that there was no need to fear retaliation on the part of the United Kingdom even if we had refused to participate in inter-Imperial arrangements on the Ottawa model. It was alleged that as most of India's exports were the result of British enterprise and capital in this country, the United Kingdom was unable to retaliate against India. The Ottawa Agreement was concluded in haste and India could have obtained greater advantages in proper bargaining.

The Indian Legislative Assembly turned down the Ottawa Agreement and its sequel the Indo-British Trade Agreement of 1935 in March, 1936. The Government of India in consequence gave six months' notice of termination of the Agreement in May, 1936 and meanwhile fresh negotiations were started to conclude a new agreement. It was then announced in October, 1936 that pending the conclusion of a new agreement, both Governments agreed to keep in force the 1932 Agreement, subject to three months' notice of termination by either party. Accordingly the Indo-British Trade Agreement of 1939 was concluded.

The Bombay-Lancashire Textile Agreement or The Mody-Lees Pact :—Despite the general opposition of the Indian textile industry, an agreement was reached between the Bombay Millowners Association presided over by Sir H. P. Mody and the British Textile Mission to India led by Sir William Clare Lees in 1933 and the agreement was to remain in force till 31st December, 1935. It provided for the stabilization of the position regarding the tariff on imports of United Kingdom piece-goods into India, when the revenue position of the country rendered it possible for the Government of India to remove the general surcharge on all imports, imposed in October, 1931. A lower scale of duties on cotton yarns and artificial silk piece-goods imported into India from Lancashire was agreed to on the Indian side. This was incorporated in the Indian Tariff (Textile Protection) Amendment Act, 1924. Regarding the Empire and other overseas markets, it was agreed that any advantages which might be arranged for British goods should be extended to Indian goods and that India should participate in any quota which might be allocated to the United Kingdom in markets in which India had no independent quota. As regards raw cotton, an undertaking was given that the British Textile Mission would be prepared to recommend effective action being taken to popularize the use of the Indian raw material in the interests of the Indian cotton grower. Although the Agreement resulted in large offtake of Indian cotton by Lancashire, which also recognised the need for protecting the Indian textile industry and promised to encourage the same in overseas markets, it was complained that the Agreement virtually deprived the Indian industry of a substantial part of the protection hitherto enjoyed by it without any concrete commitment by Lancashire.

The Supplementary Indo-British Trade Agreement of 1935 :—This agreement of 1935 was actually supplementary to the Ottawa Pact and was meant to remain in force as long as the Ottawa Agreement was effective.

By this Agreement the Government of India gave formal expression to the general principles governing the treatment of United Kingdom goods competing with the products of a protected Indian industry. It was recognised that while protection to an Indian industry might be necessary in the interest of the economic well-being of India, the conditions might be such that an Indian industry required a higher level of protection against foreign goods than against imports of United Kingdom origin. The Government of India undertook to give protection only to such industries as after due inquiry by the Tariff Board had established claims thereto in compliance with the policy of discriminate protection. The extent of protection was not to exceed what was necessary to equate prices of imported goods to fair selling prices for similar indigenous goods, and subject to this condition, lower rates of duty whenever possible were to be imposed on commodities of United Kingdom origin. The Government of India also agreed to provide full opportunity to any industry concerned in the United Kingdom to state its case and answer cases presented by other interested parties before the Indian Tariff Board when the question of grant of protection to an industry was referred to that body. The Government of India further assured that in the event of any radical change in the conditions affecting protected industries during the currency of the period of protection, they would on the request of His Majesty's Government, or of their own motion, cause an inquiry to be made as to the appropriateness of existing duties and that in such an inquiry full consideration would be given to any representation put forward by any interested industry in the United Kingdom. The United Kingdom Government in exchange undertook to consider steps which might be taken to develop the import from India of raw or semi-manufactured materials used in the manufacture of articles subject to differential import duties in India. They also agreed to take further steps to stimulate the use of Indian cotton in all possible ways, including research, commercial investigation, market liaison and industrial propaganda. They also agreed to continue the privilege of duty-free entry of Indian pig-iron into the United

Kingdom so long as the duties on articles of iron and steel imported from the United Kingdom into India were not less favourable than those provided for in the Iron and Steel Protection Act of 1934.

The Indian commercial opinion opposed the measure alleging that it violated India's Fiscal Autonomy Convention and put a brake on the policy of discriminate protection at the cost of Indian enterprises. The Agreement conferred positive benefits on the United Kingdom in exchange of mere verbal assurances from the latter. The Indian Legislative Assembly also voted against the measure. The Government however supported the agreement, which merely implemented in practice the principles agreed to in the Ottawa and Mody-Lees Pacts. It did not interfere with India's policy of discriminate protection. On the contrary the Agreement conferred on India material benefits regarding the increased consumption of Indian cotton, raw and semi-raw materials, and the privilege of duty-free entry of Indian pig-iron into the United Kingdom. India was also promised a share in such facilities as might be granted to British cotton piece-goods by the Colonies and Protectorates.

It may be observed that the supplementary Indo-British Trade Agreement expired with the cessation of the Ottawa Agreement.

The Indo-British Trade Agreement of 1939 :—This agreement was effected in March, 1939 and subsequently ratified by legal enactment, passed by the certification of the Governor-General. The new Agreement introduced substantial modification of the Ottawa Pact. It was aimed to keep as large export items as possible within the preferential orbit. The scope of preferences granted to the United Kingdom was considerably narrowed by excluding articles under food, drink and tobacco and raw materials or semi-manufactured goods which were entitled to preference under the old arrangement. Under the new Agreement, the majority of the items included specialised products not manufactured in India e.g., motor cars, cycles, etc.

Regarding other items, e.g., woollen carpets and rugs, drugs and medicines, etc., the imports from the United Kingdom consisted of special varieties which were produced in India in negligible quantities. Certain preferential heads were redefined so as to exclude a number of commodities which were formerly

included. Thus, under the head of chemicals, drugs and medicine, several acids and chemical products were removed from the scope of preference. An outstanding change from the Ottawa Pact was that while the latter had left untouched commodities which enjoyed protection in India, the new Agreement incorporated an arrangement regarding duties on Lancashire goods, though the Indian textile industry was a protected industry.

India allowed a preference of 10 per cent to a number of items of imports of British goods like chemicals, paints, remnants of piece-goods, woollen carpets, sewing machines and 7½ per cent on motor cycles and scooters, cycles and omnibuses, etc.

The United Kingdom in addition to continuing the free admission of certain Indian goods, e.g., lac, raw jute, mica slabs, myrobalans, accorded the following main preferences: a preference of 10 per cent ad valorem to bones, linseed, castor-seed, ground-nuts, leather (undressed), coir yarn, soya beans and spices etc.; a preference of 15 per cent among other things to certain jute manufactures *e.g.*, cordage, cables, ropes and twine, castor oil, rapeseed oil, linseed oil, groundnut oil, leather (dressed), paraffin wax; a preference of 20 per cent on coir mats and matting, cotton manufactures and certain jute manufactures like sacks and bags, and preferences at specific rates to magnesium chloride (1*s.* per cwt.), handmade knitted carpeting and floor rugs (4*s.* 6*d.* per sq. yard), coffee (9*s.* 4*d.* per cwt.), tea (2*s.* per lb.) and rice (⅜*d.* per lb.). Regarding pig iron, which continued to enjoy free entry, the British Government reserved to itself the power to impose after 31st March, 1941 a customs duty on imports of Indian pig-iron, if after the expiry on that date of the Iron and Steel Protection Act of 1934, duties imposed on imports of iron and steel into India were substantially less favourable to the United Kingdom than those provided for in that Act.

The separation of Burma from British India was responsible for the abolition of some preferences *e.g.*, lead, rice meal, etc. and reduction in the value of others *e.g.*, teakwood, paraffin wax, rice and tobacco. Under the new Agreement a sliding scale of duties was levied on cotton piecegoods and it was linked with the export of Indian cotton to the United Kingdom and with the imports of cotton piece-goods from the United Kingdom into India. Provision was made in the new Agreement for the negotiation of a separate trade treaty with Ceylon, which was to enjoy the

Ottawa schedule of preferences for a period of six months after the Agreement came into operation. The schedule of mutual preferences between India and the Colonies remained unchanged barring one or two exceptions.

The Agreement was again opposed by the commercial and trade organisations of the country. The Government had to pass the Agreement despite the adverse vote of the Legislature. It was argued that preferences granted to the United Kingdom were far in excess of those recommended by non-official advisers and left no scope to India for concluding any trade pact with other countries. Preferences enjoyed by the United Kingdom were real, while India benefited little from preferences granted on her exports, which consisted mainly of raw materials used by the United Kingdom for her industries. By granting preferences to the United Kingdom's exports of chemicals, paints, apparel, instruments, etc., indigenous industries were hit hard. India's exports suffered due to the withdrawal of preference on wheat, the old preference being taken away in order to afford freer access to American wheat in the British market and this step was justified on the ground that the wheat preference was of no practical importance to India. The export trade of India was also jeopardised by the reduction of the preference on rice, refusal of the British Government to withdraw the drawback facilities regarding linseed, utilised in the manufacture of linseed oil and reductions of the preference on chrome leather and in the margin of preference enjoyed by hand-made Indian carpets. It should be borne in mind that in spite of an export surplus in merchandise, India was indebted to the United Kingdom on balance of payments account due to large invisible imports. The non-official advisers insisted upon giving reciprocal advantages to Indian banking, shipping and insurance against prevailing discriminatory treatment and claimed a specific share in the carrying trade for Indian bottoms. The cotton clause was found to be the most unhappy item in the Agreement. It correlated the export of Indian raw cotton to imports of Lancashire and British piece-goods in this country and India did not receive a square deal in this Agreement. Regarding the stipulated quantity of Indian raw cotton to be bought by the United Kingdom, it did not mean any special sacrifice on the part of the United Kingdom and the stipulated quota actually fell short of the normal offtake of Indian

cotton by Lancashire cotton industry, while India was asked to guarantee, with the aid of effective sanctions, the intake of United Kingdom cotton piece-goods far in excess of the actual quantity of Lancashire imports into India before the Agreement. The Agreement failed to make any mention about the proportions of different varieties of Indian cotton in spite of the demand of the Indian cotton-growers that at least 65 per cent of the offtake should be short-staple cotton. Despite the declaration of unofficial advisers that any further indirect taxation or burden put on the Indian cotton industry would necessarily call for similar countervailing increases in the duty on imports of cloth, the import duty on long-staple cotton was doubled. This reduced the protection available to the Indian cotton mill industry and adversely affected our handloom industry. It may however be observed that the Agreement introduced substantial improvements over the Ottawa Pact.

The Indo-Japanese Trade Agreement of 1934 :—The evil effects of the Indo-Japanese Trade Convention of 1904, extending to Japan the most-favoured-nation treatment began to be keenly felt in India from 1932, when the continued depreciation of the yen conferred special advantages on Japanese exports to India and Indian industries were threatened with nearly complete collapse. Therefore six months' notice of termination of the Convention was given and this led to the boycott of Indian cotton by Japan, which became effective from June, 1933, when import duties on Japanese cotton textiles were steeply increased. An increase was made in the duty on foreign including Japanese cotton piece-goods to 75 per cent ad valorem with a minimum specific duty of 6¾ annas per lb. on plain greys. A Japanese delegation came to India in October, 1933. After negotiations lasting over three months, an agreement was reached between the two countries. The Japanese boycott was withdrawn in January, 1934 and the 75 per cent duty was reduced to 50 per cent by the Government of India.

The Agreement of 1934 with Japan consisted of two parts, the Convention and the Protocol. The convention defined the trade relations between the two countries in future and the Protocol specified the agreement reached regarding the importation of cotton piece-goods from Japan into India and the export of raw cotton from India to Japan. The Protocol without the

Convention was to expire automatically on 31st March, 1937 and the Convention would terminate on the same date, if denounced by either of the contracting parties by giving six months' notice. The contracting parties agreed to extend to each other the most-favoured-nation treatment. India and Japan retained the right of imposing or modifying from time to time special customs duties on the imports from each other at such rates as might be necessary to correct the effect of any variation in the exchange value of their respective currencies, subsequent to 31st December, 1933. Though both parties reserved the right to make such changes in their customs tariffs as might be necessary for the protection of their own interests, they agreed to enter into negotiations in order to reconcile the interests of the two countries, when requested to do so by either party.

The customs duties to be imposed on imports into India were not to exceed the following rates:

Plain greys, 50 per cent ad valorem or 5¼ annas per lb., whichever is higher; others 50 per cent ad valorem.

The Protocol prescribed a system of quotas for the imports of Japanese piecegoods into India and the export of raw cotton from India. Under this agreement Japan was allowed to export to India in any cotton piece-goods year 325 million yards of cotton, exclusive of re-exports provided she purchased one million bales of cotton from India in any cotton year. This was the basic quota. The maximum quantity of cotton piece-goods which Japan could send to India was fixed at 400 million yards a year and for this purpose the basic allotment of 325 million yards was to be increased by 1½ million yards for every 10,000 bales of the excess over 1 million bales taken in any cotton year. The sub-allotment of the cotton piecegoods which might be sent to India in any year was divided into four categories, namely, plain greys 45 per cent, bordered greys 13 per cent, bleached (white) goods 8 per cent and coloured (printed, dyed or woven) goods 34 per cent.

Indian cotton-growers benefited largely from this agreement as Japan took substantially larger cotton supplies from India than what was provided for in the agreement, but it is contended that Japan did so to get hold of cheap raw cotton.

Japan fully availed of the most-favoured-nation treatment by dumping Indian markets with miscellaneous goods to the detriment of Indian industries and handicrafts.

The agreement provided for a quota of raw cotton to be exported to Japan from India in exchange for a specific import of Japanese piecegoods and this quota proved very harmful in practice. The loopholes of the quota system were fully utilised and unlimited quantities of Japanese piecegoods were imported into India. Fents and artificial silk goods were outside the quota and were largely imported into India. Japan circumvented the quota system by exporting to India large consignments of made-up cotton goods, *e.g.*, shirts, skirts, dresses, etc. In practice, therefore, larger quantities of Japanese piecegoods than provided for in the Protocol were brought to India. Besides, Indian exports of pig iron, jute and oilseeds to Japan showed a downward tendency.

The Indo-Japanese Agreement of 1937 :—The revised Indo-Japanese Trade Agreement came into operation from 1st April, 1937 and was to remain in force until 31st March, 1940.

The Trade Convention maintained the status quo and Japan was thus assured of the most-favoured-nation treatment for a period of three years. The revised cotton Protocol was substantially the same as the old one, barring a few modifications, which were necessary following the separation of Burma from India from 1st April, 1937. The annual basic import quota of Japanese piecegoods was reduced from 325 million yards to 283 million yards against the purchase by Japan of Indian raw cotton of one million bales. The maximum limit of imports of cotton piecegoods, which was conditional on Japan's taking 1½ million bales of raw cotton from India, was reduced from 400 to 358 million yards. The new Protocol sub-divided coloured piecegoods into categories of printed goods and dyed or woven goods and the percentage quota apportioned to coloured piecegoods was stepped up from 34 to 37. The basic quota of cotton piecegoods was exclusive of cotton fents, but Japan undertook to limit imports of cotton fents into India to 8,950,000 yards annually. The Government of India agreed that customs duties on cotton fents would not exceed 35 per cent ad valorem.

The new Agreement failed to implement the recommendations of the non-official advisers and maintained status quo. The demand for protecting indigenous industries of India, engaged in producing miscellaneous articles, was ignored and the most-favoured-nation treatment was retained by keeping the Trade

Convention unimpaired. Although the Indian mill industry and the indigenous silk industry were assisted by the Finance Department Notification of 1937, prohibiting imports of artificial silk fents into India and raising the import duties on artificial silk piece-goods by an average of an anna per square yard, fents and artificial silk goods were left outside the quota. Japan benefited substantially by the agreement.

Provisional Agreement of 1940 :—The Government of India decided in December, 1939 not to give the necessary six months' notice of termination of the Trade Convention with Japan after receiving an assurance from the Government of Japan that the latter had not the least intention to take advantage of any interval which might arise between the termination of the Protocol and the Convention in the event of protracted negotiations. On the expiry of the Protocol on 31st March, 1940 the two Governments agreed that during the period intervening between the expiry and the framing of a new Agreement, they would not take any action which might prejudice each other's trade. The prospects of concluding any trade agreement with Japan appeared to be rather remote in view of the announcement by the British Government of the denunciation of trade treaties with Japan in July, 1941. Accordingly the necessary six months' notice of termination of the Indo-Japanese Trade Convention of 1934 was given to Japan.

The Indo-Burma Trade Agreement of 1941 :—The new Agreement, signed in April, 1941 enabled the Governments of India and Burma to impose tariff duties, subject to the reciprocal concession that their general tariff rates would give margins of preference to goods of India and of Burma as the case might be of 10 per cent against Empire products and of 15 per cent against foreign goods. The contracting parties also agreed to give each other the most-favoured-nation treatment.

Burma agreed to allow free entry to some 77 articles e.g. canned fish, coal, raw cotton, cotton twist, pig-iron etc. She also undertook not to tax certain goods at rates in excess of 5 per cent e.g. potatoes, coconuts, chemicals, drugs, and medicines, paints, woollen blankets, rugs etc. and not to tax certain goods e.g., coffee, cigars, certain spices, toilets, soap, boots, shoes, etc. at rates in excess of 10 per cent. Certain goods when imported into Burma were to be taxed at special rates not exceeding those

as shown below, e.g. betelnuts, 20 per cent; ale and beer at the rate of the excise duty; tobacco, one anna per pound and silk, artificial silk and mixed fabrics, 15 per cent.

India in return agreed that certain goods of Burmese origin, e.g. dyeing and tanning substances, gums, resins and lac, wood and timber, lacquered ware, iron ore, aluminium, lead and zinc metals (other than iron and steel), etc. were to be allowed free entry. Duties on certain goods were to be levied at special rates, e.g. potatoes and onions 5 per cent, coffee 10 per cent, cigar 10 per cent and tobacco (unmanufactured) one anna per pound. The tariff treatment of Indian cotton piece-goods exported to Burma and of Burmese kerosene exported to India were regulated separately. Although the Agreement provided for a duty of 7½ per cent on Indian cotton piecegoods, the Burma Government undertook not to fix the duty on such goods at more than 10 per cent. The position of Indian textiles in Burma was also fortified by the retention of the quota on the Japanese goods at prevailing level. Regarding kerosene, while the margin of preference was reduced to nine pies per gallon, compared with the former margin of eleven and a quarter pies, the Government of India secured the right to levy a surcharge equal to the entire margin of preference during the war period. The surcharge came into force on 7th April, 1941. The exports of timber to India and of imports of sugar into Burma were also specially dealt with. The Burma Government agreed not to levy any export duty on timber during the war period. The imports of Indian sugar into Burma were accorded special privileges. Rice and broken rice were allowed free entry and no duty was to be levied in India on these commodities as long as they were permitted to be imported free of duty from other countries. If a duty was levied on broken rice, a preference not exceeding 10 per cent on the amount of the duty was to be allowed to imports from Burma. Regarding exports of commodities, which were liable to excise duty e.g. motor spirit, matches, salt, sugar, it was provided in general that the rate of the customs duty should correspond to the level of the excise duty prevailing in the country of imports. The Agreement was to remain in force, subject to the right of either party to terminate it at six months' notice.

Present Trend of Commercial Policy :—There has been a fundamental change in world commercial policies from the

thirties of the present century. The nations of the world began to discard the old trade policy based on the most-favoured-nation treatment principle and adopt bilateral trade agreements, which took either the forms of Clearing and Compensation or Barter Agreements. Clearing arrangements are designed to regulate foreign exchanges and equate exports and imports through the mechanism of bilateral agreements, without specifying the items of trade. Barter arrangements provide for the direct exchange of commodities, eliminating the necessity of evolving the means of payment. Most-favoured-nation treatment clauses provided in bilateral agreements are rendered useless for all practical purposes by including quota, financial, industrial provisions etc. Economic nationalism, self-sufficiency and bilateralism became outstanding features of world trade in place of free international trade.

Although India was officially committed to freer international trade, following the principles of most-favoured-nation treatment, she unknowingly participated in bilateral trade agreements in the Indo-British, Indo-Japanese and Indo-Burma Trade Agreements.

Since the cessation of World War II, the United Nations Conference on Trade and Employment met in March, 1948 at Havana and approved a charter for international trade and set up the International Trade Organisation to promote freer trade amongst nations of the world. The Havana Agreement was signed by 53 nations including India, although no Government has yet ratified the same. This Agreement followed the Geneva Agreement on Trade and Tariff amongst 23 nations, including India.

The Havana Charter aimed at promoting freer international trade by eliminating restrictions and discriminatory practices and the International Trade Organisation wisely provided for special restrictions to be practised by countries, which are industrially backward and require to be specially protected to develop their own industries. One of the chief functions of the Indian Fiscal Commission recently appointed by the Government of India is to examine India's case in regard to the Havana Charter and International Trade Organisation and it has been asked to report at an early date as to whether India should join the International Trade Organisation and under what conditions.

India like other countries is trying to seek trade expansion by contracting bilateral trade agreements with various countries

within the framework of the International Trade Organisation. It is pointed out that India so far has entered into trade agreements with 7 European countries—the Anglo-American zone of Germany, Yugoslavia, Hungary, Czechoslovakia, Poland, Finland and Switzerland. With the exception of the first two countries, which signed the agreements in July and December, 1948, respectively, agreements with the rest of the countries were signed during the last two months. These agreements, according to them, have had no effect so far on the rate of India's utilization of sterling balances.

Under these trade agreements India has agreed to license for export mainly such commodities as raw jute, jute manufactures, cotton or cotton waste, manganese ore, coir and coir manufactures, shellac, zinc, tea, hides and skins, oilseeds and oils. In fixing the quantities for export, it is stated that India took into account the quantities which were exported to these countries in the past and also the special factor affecting the export trade in the commodities concerned.

If the quantities agreed to under the agreements are examined it will be found that there is no appreciable diversion of exports from Britain to the European countries. In instances where the agreed quantities are in excess of the exports recorded in the past the agreements are designed to foster direct exports from India to these countries, instead of indirect exports which took place in the past.

In many cases small quantities of scarce materials like jute and jute manufactures, which could have found a market in Britain have been allotted to a European country, because the consequent reduction in India's sterling is compensated by diversion of some of India's purchases of essential commodities from hard currency countries to the European countries concerned. It is thought that this will help not only India, but the sterling area as a whole.

Furthermore, there are other commodities like foodgrains, steel, non-ferrous metals and certain types of capital equipment, which India is unable to obtain to satisfy her entire requirements from the sterling countries and, therefore, she has no option but to obtain these wherever they are available, even at the cost of a slight diversion of her exports.

Working of these bilateral agreements in practice therefore refutes the charge made in certain quarters in Britain that bilateral trade agreements, which India has entered into with some European countries, have had the effect of diverting India's exports of scarce raw materials from the British market to non-sterling areas, thus reducing India's current earnings of sterling and draining the sterling balances faster.

CHAPTER XXIII

PUBLIC FINANCE

Introductory :—Up to the war of 1914-18, the Central Government of India was the sole taxing authority and there was one Budget presented by the Centre for the whole country. The separation of Central from Provincial finance started after the cessation of World War I and the Indian financial system began on federal lines.

Central Heads of Revenue : Customs Up to 1914 : —There was an import duty of 5 per cent on raw produce before the Mutiny and goods carried in non-British ships had to pay at double the ordinary rate. After 1848 the nationality of the ship was no longer the differential criteria, but non-British goods were made to bear duty at double the ordinary rate. After 1859 this differential scale of duty was abolished and the general rate of duty was stepped up to 10 per cent. and was again reduced to 7½ per cent. in 1864 and 5 per cent. in 1875. Subsequently, following the agitation by Lancashire manufacturers, all duties were abolished in 1882. Again a general import duty at 5 per cent. ad valorem was imposed in 1894, exempting cotton yarns, piecegoods and some other goods. Certain countervailing duties were imposed between 1899 and 1904 on bounty-fed sugar of Germany, Austria, Denmark, etc. These were all finally removed by 1912. In 1910-11, higher import duties were imposed upon bullion or coin and petroleum. It may be observed here that at the end of 1894, an import duty of 5 per cent. was levied on cotton fabrics and yarn and an equivalent countervailing excise duty was imposed upon yarns of 20 counts and above produced in Indian mills. The import duty on cotton piecegoods was lowered to 3½ per cent. in 1896 and an equivalent excise dúty was imposed upon all Indian mill-woven cloth, cotton yarns foreign or local were free of all duties.

Export duties were an outstanding feature of the tariff policy until 1860, when there was an export duty of 3 per cent. ad valorem on all exports. A general principle of abolishing export duties was pursued from 1860, until there was only an

The same party again tried to abolish the salt duty during the Budget Session of 1936. Then this duty was ultimately ended by the Budget of 1947.

The salt tax was a bone of contention from its inception and most of the criticisms against this tax was inspired by political and sentimental considerations rather than by economic reasoning. As a tax it was easily a sound tax, because it yielded a large revenue, imposing the least burden on the people. It is estimated that it yielded a revenue of 8·34 crores to Rs. 10·91 crores per annum between 1941 and 1947 and assuming the average consumption of salt per head at half a seer per month, the tax worked out at 9 pies per head per month. It was a tax, which everybody paid and thereby felt the obligation of an individual to the state. The critics of the salt tax argued that it was a regressive tax, because as the consumption of salt formed a larger percentage of expenditure to the total budget of a poor man as compared with a rich person, the poor people paid proportionately more. The masses of India are too poor to afford to pay any taxation at all.

The abolition of this old tax, to which the people became automatically habituated, brought subsequently financial difficulties for the Government, which was obliged to tap other sources of revenue to recoup the loss of income. The Government had to impose the cotton excise duty and other indirect taxes, which have been severely criticised.

It may be observed that in an Ordinance published on 16th January, 1948, the Pakistan Government announced a reimposition of the duty in Pakistan and rightly defended this tax on the ground that all citizens ought to be made to contribute to the revenues of the State. The salt tax yielded a substantial revenue at a small cost of collection and its burden on the individual consumer was negligible.

Opium :—Opium was until recently a considerable source of revenue and the occasional windfalls under this head were remarkable. The method of production and sale under Government monopoly was adopted in preference to heavy export duties, being satisfactory from the point of view of revenue and obviating the possibility of smuggling. The revenue from opium until the end of 1935 was derived from three main sources,

namely, the monopoly profits of the sale of opium manufactured in Government factories and intended for export to foreign countries, income from the export duty levied on the purchase of opium sent out from the Indian States of Rajputana and Central India and profits of monopoly in the form of licence fees or vendor's fees derived from the internal consumption of opium in British India. Pressed by Whitehall, the Government of India entered into an agreement with China in 1907 by which sales on Government account for export to China were stopped from 1914. The revenue from opium is now substantially less than before and yielded less than half a crore of rupees in 1941 compared with an annual average of about Rs. 8 crores during the three years preceding 1913. It was announced by Lord Reading in February, 1926 that the Government desired to ban all exports of opium in future except for strictly medicinal purposes according to the instructions, issued by the League of Nations. The Government of India further agreed to stop all exports of opium before 1935. The revenue from exports of opium ceased after the end of 1935. The present receipts from opium are confined to opium sold for consumption in India which is strictly regulated, although the internal consumption is regarded high according to the standard laid down by the League of Nations. Instead of being a source of income, opium has become a burden on general revenues since 1943.

An Analysis of Central Finances :—The outstanding feature of recent Central Budgets has been a larger emphasis upon indirect taxation as a means of raising revenues. It is now realised that the limit of direct taxation has been rather overstepped and in consequence the industrial development of the country has been impeded by lack of capital formation. It has been estimated that direct taxation contributes over 51 per cent of total revenues and indirect taxes the balance. It is interesting to observe that in 1937-38 out of a total revenue of Rs. 75·8 crores direct taxation accounted for only 21 per cent, while the bulk of the revenue came from indirect taxation. This proportion naturally varied during the war years when there was a steep rise in direct taxation due to the large increase in income-tax and the levy of the Excess Profit Tax. It would be interesting to compare our position in this respect with the United Kingdom. In a highly industrialised country like the United Kingdom, the

scope for raising large revenues from direct taxation is greater. The United Kingdom budget for 1947-48 discloses that in that country the percentage of direct taxes to the total tax revenue is only 52. This compares very favourably with our tax structure in which, with a comparatively poor industrial economy, we collect about 51 per cent of our taxes from direct taxes. Another interesting feature of our economy is that as compared with 1937-38, the direct taxes would have increased eight and half times in 1948-49, while the indirect taxes would have increased only by a little over twice. Considering the relatively undeveloped state of our country it cannot be said that the burden of direct taxation in this country is unduly light or that there has been any shifting of the burden on the shoulders of the ordinary man. In view of the prevailing precarious conditions of Indian economy, no one can dispute the greater effectiveness of indirect taxation in India and India's fiscal policy should increasingly move in this direction.

Even the scope for a larger revenue from indirect taxation is rather limited in the present context, because the level of such taxation is also pretty high. Customs revenues are likely to contract, because the adverse balance of payments is a pointer towards reduced imports in order to attain financial equilibrium. Export duties are being gradually abolished or reduced in order to step up our export trade.

It therefore becomes clearly apparent that in order to secure a budgetary equilibrium, India's public expenditure should be drastically reduced. The food deficit will however continue to be the Government's headache and no substantial reduction of expenditure on this account is foreseeable in the near future. In matters of Defence expenditure, there is limited scope for economy, because India must be well fortified from the military point of view. Although expenses have mounted up following the implementation of the recommendations of the Pay Commission, it is admitted almost unanimously that there is a large scope of economy in Government Departments, which are not only top-heavy, but some of them are definitely redundant.

By recommending a token cut of about Rs. 6 crores only or about 3·06 per cent of total expenditure, the Economy Committee has naturally caused disappointment in all circles. It is realised

that there is likely to be a fall in revenue and in order to counter this a more rigorous measure of cut in expenditure is urgently called for. Important recommendations of the Committee suggest among others:

(1) that no new mission should be established in any foreign country for the next three years except under exceptional circumstances;

(2) that the posts of Cultural Relations Officer, Cultural and Labour Attachés should be abolished;

(3) that no new industry should be started as a State enterprise until it was proved by experience that industrial enterprises proposed to be started by the Government at an estimated cost of Rs. 145 crores are successful; and

(4) that Government should concentrate on the completion of the 11 national research institutes planned by the Council of Scientific and Industrial Research and should not embark on construction of new institutes.

The committee has suggested establishment of a Planning Commission to co-ordinate planning with three high-powered persons and of an "organization and method division" with five or six officers, of whom one should be top-grade, to enforce the rules of procedure and improve the working of the secretariat.

The main recommendations of the Committee are as follows:—

(1) An all-India development programme should be prepared embracing the schemes sponsored by the Central Government as well as the Provincial Governments or the Chief Commissioners' Provinces. In preparing those plans, priority must be given to the execution of irrigation projects and to the development of roads.

(2) An over-all practical programme to improve labour conditions should be evolved taking into account the needs of labour. The policy of the Government with regard to industrial housing should be reconsidered.

(3) The activities of the various Ministries and offices with regard to development should be regulated by such overall policy.

(4) While the 'Grow More Food' campaign should continue, the Centre should confine its subsidies under the scheme only to

projects which will result in increased yield of foodgrains, food-crops and, in maritime provinces, of fish.

(5) The Central Tractor Organization should look after the initial reclamation of land by heavy tractors. The Central Government should not undertake cultivation of land by light tractors.

(6) The Lake Medical College at Calcutta should, after the present commitment to the war services licentiates is over, be handed over to the Government of West Bengal, if they are willing to take it over, otherwise it should be abolished.

(7) Grants for the patronage of subjects other than scientific studies, should be subject to an over-all limit of Rs. 6 lakhs per annum for the next five years and the grant of scholarships in India to foreigners should be restricted to an over-all limit of Rs. 1·5 lakhs per year. The overseas scholarships scheme should be restricted to provide facilities for acquiring technical and scientific knowledge not available in India.

(8) After the present firm commitments of imports of rice from abroad have been fulfilled and so long as the present disparity in prices persists, import should be restricted to 200,000 tons only.

(9) Installation of new transmitters in provinces should be postponed till the provincial authorities install an adequate number of community radio sets in the rural areas.

(10) The Housing Department under the Health Ministry is not necessary and should be abolished. Any planning and advisory work relating to housing schemes of the Ministry of Relief and Rehabilitation and the Ministry of Labour should be made the responsibility of the Ministry of Works, Mines and Power.

(11) Advances made by the Government to evacuees from Burma and Malaya should be realized.

PROVINCIAL HEADS OF REVENUE

Excise :—Excise revenue is derived from the manufacture and sale of intoxicating liquors, hemp, drugs, opium etc. It is collected in forms of duties on manufacture and fees for sale licences. The major portion of the revenue is derived from country

liquors. The excise revenue was estimated at Rs. 1,78,61,570 in 1861-62 and expenditure Rs. 13,53,470 and rose to Rs. 20,41,23,285 and Rs. 2,19,18,391 respectively in 1929-30. The excise revenue yielded Rs. 15·37 crores in 1936-37.

Stamps :—Stamp revenue is derived from judicial and commercial stamps, the former representing fees on plaints and other documents in Civil and Criminal Courts and latter duties on commercial transactions recorded in writing, e.g. conveyances regarding the transfer of property, lands, bills of exchange etc. The revenue from stamps in 1939-40 aggregated Rs. 10·14 crores.

Forests :—The revenue under this head is mainly derived from the sale of timber and other produce, grazing fees and licence fees for permission to cut wood and other produce. This is likely to be a fruitful source of revenue if the forests are properly utilised. The Provincial Governments were making a large net profit of about Rs. 2½ crores per year until the thirties of the present century when the net revenue dropped to Rs. 74·90 lakhs in 1933-4. The gross revenue from forests amounted to Rs. 3·01 crores in 1939-40.

Registration :—The revenue from registration is mainly derived from registration fees according to the value of the documents registered. The total revenue from this source aggregated Rs. 1·18 crores in 1939-40.

Scheduled Taxes :—Betting and amusement taxes have been imposed in several provinces, e.g., West and East Bengal, Bombay, Madras, United Provinces and Assam. Their yield is gradually increasing.

New taxes under Provincial Autonomy :—The Government of India Act of 1935 empowered the provinces to impose certain taxes. Notable among new taxes levied by Provincial Governments were the sales tax, employment tax and immovable property tax.

The Government of Central Provinces passed an Act in 1938, imposing a tax on the retail sale of motor spirit and lubricants. Similar selective sales taxes have been imposed by other provinces e.g. United Provinces, Bihar, Assam, Bombay, etc. At present all provinces in both India and Pakistan have imposed sales tax on various commodities and this form of revenue has proved to be extremely remunerative.

The Government of United Provinces passed the Employment Tax Act of 1939, levying a tax on professional men and limiting the rate to Rs. 50 a year. In 1939-40 the Government of Bengal imposed an employment tax at the rate of Rs. 30 per annum on all trades, professions, callings and employment, the tax being payable by those who were assessable to income-tax, but the tax was subsequently withdrawn.

The Congress Ministry of Bombay decided in 1939 to levy a 10 per cent tax on rateable value on immovable urban property in the cities of Bombay and Ahmedabad in order to compensate the loss of excise revenue following the introduction of prohibition.

Public Expenditure in India :—Public expenditure in India may be broadly classified into Defence, Law and Order, National Development and Miscellaneous.

The Central budget for 1949-50 provided for an estimated expenditure of Rs. 322·53 crores, of which Defence Services accounted for Rs. 157·37 crores and Civil Expenditure Rs. 165·15 crores. The Defence budget showed a rise of Rs. 1·94 crores as compared with the previous year mainly due to operations in Kashmir.

Civil estimates included Rs. 9·85 crores for the relief and rehabilitation of refugees. A provision of Rs. 23·27 crores was made in the capital budget, Rs. 21·34 crores for loans for rehabilitation and Rs. 1·93 crores for buildings. The expenditure on food subsidies was estimated at Rs. 32·97 crores. Estimates also included Rs. 10 crores for meeting pre-partition claims and Rs. 12·83 crores for development schemes. Rs. 10·06 crores were provided for tax collection, Rs. 41·97 crores for obligatory expenses on payment of interest and pensions and provision for debt redemption, Rs. 2·04 crores for planning and resettlement, Rs. 2·23 crores for expenditure on Currency and Mint, Rs. 2·95 crores for grants-in-aid to Provincial Governments and Rs. 24·20 crores for expenditure in the nation building spheres. The balance of Rs. 28·89 crores represented the provision for administration, civil works, etc., and represented only 17·5 per cent of the total civil expenditure. Provision was also made for the grant of Rs. 26·81 crores to Provincial Governments for development and Rs. 49·25 crores for loans.

The following table illustrates the Indian Budget position for 1949-50:—

BUDGETS ESTIMATES FOR 1949-50

(In lakhs of Rupees)

	Receipts.	Percentage to Total.
Customs	107,25	34·9
Central Excises	57,75	18·8
Corporation Tax	41,81	13·6
Income Tax	113,19	36·8

(Total Revenues estimated at Rs. 307,74)

	Expenditures.	Percentage to Total.
Defence Services	157,37	48·8
Civil Expenditure ...	165,16	51·2

(Total Expenditures estimated at Rs. 322,53)

The deficit was covered by additional taxation.

Financial Relations between Centre and Provinces up to 1919 :—All financial powers devolved in the hands of the Government of India from 1833 to 1871. Revenues were paid to the account of the Government of India and Provincial Governments received fixed contributions in order to defray their expenses. This made the Central finance uncertain and led to extravagance, rigidity and friction in Provincial finance. In order to encourage provinces to develop revenues and economise in expenditures, Lord Mayo evolved a scheme of financial decentralisation. The system of 'Provincial Settlements' was in consequence introduced in 1871, under which certain heads of local expenditure were handed over to the Provinces, e.g. Police, Education, Roads and Civil Works, Registration, Medicine and Jails. The provinces were asked to manage these departments with departmental receipts in addition to lump sum grants from the Centre and were entitled to impose local taxation, if necessary. It failed to endow the provinces with adequate revenues. The system did not encourage any economy in the provinces, which were empowered to supplement their incomes by additional taxation. A further step in decentralization was taken by Lord Lytton in 1877. The remaining heads of expenditure e.g. Land

Revenue, Excise, Stamps, General Administration, Law and Justice, were transferred to the provinces. In addition to the departmental receipts and the old lump sum grants, certain heads of revenue e.g. Excise, Stamps, Law and Justice, were handed over to the Provincial Governments. The heads of revenue were therefore divided into Central and Provincial. Fixed lump sum grants were still necessary from year to year and the provinces showed no interest in the collection of revenue in which they were not given a share. Assam and Burma, being backward provinces, were not admitted to this scheme. Burma was given a share of the land revenue and also of the income from forests and the export duty on rice and salt, in addition to enumerated provincial revenues under a financial settlement made in 1879. The same principle of shared or divided revenues was applied to the province of Assam, which received a share of the land revenue. This division of revenues into wholly Imperial and Provincial and jointly Imperial and Provincial was later extended to other provinces by Lord Ripon in 1882. Lord Ripon introduced certain improvements in the provincial settlements in 1882, which were made liable to revision every five years. He abolished the fixed lump sum grants and revised the allocation of the revenues in the following way:—

(*a*) Imperial Heads:—Opium, Salt, Customs, Commercial Undertakings etc.

(*b*) Provincial Heads:—Civil Departments, Provincial Works and Provincial Rates.

(*c*) Divided Heads:—Excise, Assessed Taxes, Stamps, Forest, Registration, etc.

Instead of awarding fixed grants to the provinces to make up their deficit, a certain percentage of land revenue was handed over to them, together with fixed cash assignments under the same head. Settlements on these principles were made in 1887, 1892, and 1897. Lord Curzon made the settlements quasi-permanent in 1904, subject to revision only if there was a substantive change in the original conditions or in the event of emergencies like war and famine in order to stabilise the finances.

The settlements were declared to be permanent in 1912 by Lord Hardinge's Government, and the allocation was made in the following way. The Central Government retained for its use all

the revenues which could not be allocated or traced to any province, these being called the Imperial Heads of Revenue, *e.g.*, Opium, Railways, Customs, Salt, Mint and Exchange, Posts and Telegraphs, Military receipts and tributes from Indian States. Purely provincial heads included Forest, Excise (in Bombay and Bengal), Registration, and the departmental receipts from such provincial departments as Education, Law and Justice. There was an important class of divided heads of revenue, e.g., Land Revenue, Income-tax, Excise (except in Bombay and Bengal), Irrigation and Stamps. Receipts under these heads were divided between Imperial and Provincial Governments in stated proportions, generally equal, but determined separately for each province. There were similar arrangements on the expenditure side and the expenses of famines were shared. This kind of financial system was characterised by several defects. The divided heads of revenue were a source of constant interference on the part of the Central Government and impeded provincial development. The occasional 'doles' given by the Central Government to the Provinces rendered provincial finances uncertain and created serious inter-provincial financial inequalities. The Provincial Governments had no independent powers of taxation and borrowing. The Central Government exercised a detailed control over provincial budgets.

Financial Relations between Centre and Provinces under the Reforms of 1919 :—The political reforms of 1919 implied provincial financial autonomy, which made the abolition of the system of divided heads of revenue as a primary pre-requisite. The following new allocation of revenues and expenditures was in consequence made. Imperial Heads of Revenue: Opium, Salt, Customs, Income-tax, Railways, Posts and Telegraphs, Military receipts. Provincial Heads of revenue: Land Revenue (including Irrigation), Stamp (judicial and commercial), Registration, Excise and Forests. It was also settled to give to the Provinces a small share of the income-tax revenue, equal to three pies in the tax collection on every additional rupee of the income assessed over and above the amount of income assessed in 1920-1, following the agitation mainly carried on by Bombay and Bengal against the total loss of income-tax. The abolition of divided heads of revenue and the provincialization of some heads like Land Revenue and Stamps resulted in a Central deficit of Rs. 9,83 lakhs, which had to be met by a scheme of provincial contributions to

the Central Exchequer. A Committee was therefore appointed in 1920 under the chairmanship of Lord Meston to consider this and other allied questions and its recommendations are popularly known as the Meston Award. The Committee recommended the distribution of this Central deficit by way of initial contributions in 1921-2, which were more or less arbitrarily fixed on the basis of the increased spending power of the provinces and were intended to be eventually supplanted by standard contributions based on the capacity of each province to pay. These recommendations with certain modifications as suggested by the Joint Parliamentary Committee were embodied in the Devolution Rules, issued under the Government of India Act, 1919.

The Meston Award was a bone of contention and severely criticised by provinces. Bengal and Bombay were seriously aggrieved by the loss of income-tax, while other provinces like Madras, United Provinces and Punjab considered the rate of contributions too high and burdensome. Provinces were faced with chronic deficits and agitated for the abolition of the system of contributions. The solvency of Central finances permitted reliefs in provincial contributions in 1926-28. The amount of outstanding contributions was remitted in 1927-28 and the system was finally abolished in 1928-29.

Although the system of provincial contributions was ended, the majority of the provinces remained unsatisfied. The 1919 Reforms allocated the sources of revenues between the Centre and provinces in a haphazard manner. It gave rise to provincial inequalities. Industrial provinces like Bengal and Bombay lost the most fruitful source of income-tax, while agricultural provinces benefited substantially from the land revenue. The provincial contributions were designed to cushion these inequalities, but their abolition further accentuated these maladjustments. It was also pointed out that the Centre was allocated income-tax and customs which were expansive sources of revenue, while provinces were given inelastic revenue resources and this placed provinces in great financial difficulties. Provinces were given the responsibility of nation-building departments and of looking after famine reliefs and these required larger finances. The Simon Commission rightly remarked in 1930 that provinces were confronted with stagnant revenues, while future requirements were unlimited. Provincial autonomy in order to be real and effective

implied more spending capabilities and the Meston Settlement failed to arm provinces with requisite financial resources.

Financial Relations between Centre and Provinces under the Constitution of 1935 :—The Government of India Act provided that while taxes and duties might be levied and collected by one authority, the proceeds might be allocated wholly or in part to others. The Federal list consisted of customs, excise duties on tobacco and other goods manufactured or produced in India, excepting alcoholic liquors for human consumption, opium, Indian hemp and other narcotic drugs and narcotics, non-narcotic drugs, medicinal and toilet preparations containing alcohol, Corporation tax, salt, taxes on income other than agricultural income, taxes on the capital value of the assets, exclusive of agricultural land, of individuals and companies, taxes on the capital of companies, duties regarding succession to property other than agricultural land, stamp duties regarding bills of exchange, cheques, promissory notes, bills of lading, letters of credit, policies of insurance, proxies and receipts, terminal taxes on goods and passengers carried by railway or air and taxes on railway fares and freights. The Provincial list composed of land revenue, including the assessment and collection of revenue, excise duties on the enumerated goods manufactured or produced in the province and countervailing duties at the same or lower rates on similar goods produced elsewhere in India, *e.g.*, alcoholic liquors for human consumption, opium, Indian hemp and other narcotic drugs and narcotics, non-narcotic drugs, medicinal and toilet preparations containing alcohol, taxes on agricultural income, taxes on lands and buildings, hearths windows, duties regarding succession to agricultural land, taxes on mineral rights subject to any limitations imposed by any Act of the Federal Legislature relating to mineral development, capitation taxes, taxes on professions, trades, callings and employments, taxes on animals and boats, taxes on the sale of goods and advertisements, cesses on the entry of goods into a local area, taxes on luxuries, including taxes on entertainments, amusements, betting and gambling, the rates of stamp duty regarding documents other than those specified in the Federal List, dues on passengers and goods carried on inland waterways, tolls and fees regarding any of the matters in this list, but not including fees taken in any Court.

Sir Otto Niemeyer's Award :—Sir Otto Niemeyer was appointed to investigate the financial relations between the Centre and Provinces especially in regard to the allocation of 50 per cent of total income-tax to the provinces and he submitted his report in 1936. Sir Otto estimated the income-tax to yield Rs. 12 crores a year. Half of this, assignable to the provinces, was to be retained by the Centre for the first five years in order to enable the Centre to consolidate its position. In course of the next five years, by six equal steps beginning from the sixth year from the introduction of provincial autonomy, this revenue was to be made available to the provinces gradually, so that after ten years the provinces would receive their full share of the income-tax. The income-tax was however not to be relinquished, so long as the portion of the distributable sum remaining with the Centre together with any contribution from Railways aggregated to less than Rs. 13 crores.

Sir Otto recommended immediate help from the beginning of provincial autonomy to certain provinces, partly in the form of cash subventions, partly in the form of cancellation of the net debt incurred prior to 1st April, 1936, and partly in the form of the distribution of a further 12½ per cent of the jute export duty. The entire net debt was cancelled in cases of Bengal, Bihar, Assam, Orissa and North West Frontier provinces, while all pre-1936 deficit debt plus about Rs. 2 crores pre-1921 debt was cancelled in case of Central Provinces.

Annual cash subventions were distributed in the following way, e.g., United Provinces, Rs. 25 lakhs for 5 years only, Assam, Rs. 30 lakhs, Orissa, Rs. 40 lakhs, North-West Frontier Province, Rs. 100 lakhs subject to reconsideration after 5 years and Sind, Rs. 105 lakhs to be reduced by stages after 10 years.

The following annual reliefs were recommended: Bengal, Rs. 75 lakhs, Bihar, Rs. 25 lakhs, Central Provinces, Rs. 15 lakhs, Assam, Rs. 45 lakhs, North-West Frontier Province, Rs. 110 lakhs, Orissa, Rs. 50 lakhs, Sind, Rs. 105 lakhs and United Provinces, Rs. 25 lakhs. The additional recurring cost to the Centre aggregated Rs. 1,92 lakhs.

Orissa was recommended to obtain a further non-recurring grant of Rs. 19 lakhs and Sind Rs. 5 lakhs.

The percentage division of the distributable portion of the income-tax between the Provinces was recommended to be as

follows:—Madras 15, Bombay 20, Bengal 20, United Provinces 15, Punjab 8, Bihar 10, Central Provinces 5, Assam 2, North-West Frontier Provinces 1, Orissa 2 and Sind 2.

The Government of India accepted in full and implemented in practice the recommendations of Sir Otto. The Railway surplus of 1937-38 along with improved Central finances enabled the assignment of income-tax to the provinces under the Niemeyer Award from the financial year 1937-38.

The Niemeyer formula for the assignment of their share of the income-tax to the Provinces was amended by Parliament in February, 1940. Under the amended Order-in-Council, the Railway contribution was excluded from Central calculation of the sum available for the Provinces and the Central share of the divisible pool was fixed at the average of the last three years, namely Rs. 4½ crores, for each of the three years 1939-40, 1940-1 and 1941-2, the balance being distributed to the provinces. The same arrangement was continued for 1942-3, 1943-4 and 1944-5 under subsequent amendments. The amount to be retained by the Centre from the provincial share was reduced to Rs. 3·75 crores in 1945-6 and Rs. 3 crores in 1947-8. The above alteration was necessitated by war conditions. The expenditure of the Central Government rose sharply, while Customs revenue declined substantially.

Following the partition of the country the provinces' quotas of the divisible pool of income-tax have been fixed thus: Bombay 21 per cent, U. P. 19 per cent, Madras 18 per cent, West Bengal 12 per cent, Bihar 13 per cent, C. P. 6 per cent, Assam 3 per cent, East Punjab 5 per cent and Orissa 3 per cent.

It may be observed that the distribution of tax resources between the Centre and Provinces has always been a bone of contention. The Niemeyer Award and its subsequent modification left nearly all provinces unsatisfied. Provinces like Bombay and West Bengal argued that their share of income-tax is unfair, because they contribute a large share to the total collections, while Madras, Bihar and United Provinces pleaded for the allocation on a population basis. Bombay saw no equity in giving a share of the jute duty to West Bengal as she received nothing from cotton duties. Provinces argue that they have been entrusted with responsibilities of nation-building departments, which

required expansive resources, but they have been endowed with stagnant revenues. The Centre on the other hand claims that she has the onerous task of maintaining law and order throughout the country and preserving the financial stability of India. It is imperative that the Centre should be assured of adequate and stable finances. It is true that expenditures of the Centre were stationary in the past, but the pattern of Central expenditure has undergone fundamental changes since India's Independence. The Centre is now undertaking numerous schemes of development, which require expansive resources like Income-tax and Customs.

It is universally recognised that in order to ensure a progressive development of the country, it is necessary to guarantee financial solvency to both the Centre and Provinces and therefore the Constituent Assembly will be faced with the most difficult and delicate task of determining the financial powers of the Centre and of Provinces.

The Constituent Assembly is scheduled to meet again by the end of July. Meanwhile attempts will be made to compose differences on some financial controversies which are rather acute. Notable among them are the Centre's powers of financial control, the basis of financial contributions from the Centre to the provinces, Central versus Provincial control on sales tax, enumeration of subjects in the concurrent and provincial lists and emergency provisions in the event of breakdown of the constitution.

The necessity of a strong financial control was never more keenly felt than under the present emergency. The country is now passing through a financial crisis of serious magnitude and the Centre's attempts to control the economic situation has failed to produce the requisite results due to the recalcitrance of provinces, who appear to have failed so far to co-operate with the Central Government. The Centre initiated an anti-inflationary drive in November last year and provinces signally failed to help the Centre in order to attain any mentionable measure of success. The Centre devised measures to step down agricultural prices, mop up the surplus purchasing powers of rural areas by means of a small savings campaign and advised provinces to go slow with prohibition and anti-zemindari drive. One can easily appreciate the difficulties of provincial ministers in these directions, who are now keen on winning the next elections by cultivating cheap popularity. It is high time that they should realise the

seriousness of our national problem and lift the interests of the country above party politics.

It is well known how the provinces after writing off a large revenue from excise by following prohibition have been widening the sales tax indiscriminately with disastrous consequences on the economy of the country. Sales taxes have been unduly stepped up and spread over a large number of essential commodities in varying degrees by different provinces. This has in consequence led to large provincial inequalities and impeded seriously inter-provincial trade. The tax is now rightly regarded as heavy and inequitable. It is therefore eminently desirable that the Centre should control the levy of the sales tax to ensure uniformity, although the proceeds may be fully assigned to provinces.

It may be interesting to note here the salient features of the financial provisions of the Draft Constitution of India, which will be finalised by the Constituent Assembly in the forthcoming session. The distribution of revenues between the Centre and the Units under the Draft Constitution is same as that under the Government of India Act, 1935. The Centre and Provinces have separate sources of revenues. The former will continue to impose income-tax, corporation tax, customs duties and central excise duties, while the Provincial Governments would be levying land revenue, agricultural income-tax, sales tax, taxes on entertainment, betting and gambling, taxes on professions and trades, provincial excise duties and registration, forest and stamp duties. The units are given shares in the Central sources of revenues. For instance, the Provinces under the Draft Constitution will enjoy a share in income-tax and will also receive grants-in-aid from the Centre. Stamp duties and duties of excise on medicinal and toilet preparations which are mentioned in the Union List will be levied by the Centre but collected and appropriated by the Provinces. So far as succession duties and estate duties on property other than agricultural land, terminal taxes and taxes on railway fares and freights are concerned, these are to be levied and collected by the Centre but handed over to the Provinces on such principles as may be determined by Parliament. Prima facie this may appear paradoxical that while one body is allowed to levy the taxes, another is empowered to enjoy the yield, but this is the practice in every federation with a view to securing economic

uniformity. Similarly, taxes on income other than agricultural income are to be imposed by the Centre but distributed between the Federal Centre and the Units.

The Centre is empowered to levy and retain surcharges on these taxes and duties; thus the Federal Centre is provided with a reserve power to raise additional sums. Export duty on jute or jute products will not form part of the revenues of the Centre. It will be distributed amongst the jute growing provinces in accordance with principles made by law. There is also provision for grants-in-aid to the provinces who are in need of financial assistance, for the proper discharge of their functions.

The Draft Constitution puts a limit to the total amount that would be payable by professions, trades, callings and employments for the benefit of a province or of a municipality, district board, local board or other local authority within that province. That amount is Rs. 250 per annum in respect of one person.

The Centre will also be receiving contributions from the railways, posts and telegraphs. The Draft empowers the Central Government to regulate the stock exchange and impose tax on it.

In every federation, the question of residuary powers is very important. Under Article 223, the residuary power with regard to taxes has been vested in the Centre.

Articles 264 and 265 provide for the mutual exemption of the property of the Federation and the Units from taxation by the other. The property of the Centre will be exempt from all taxations by the Units. Similarly, the Governments of the Units will not be liable to Central taxation in respect of lands or buildings situated within the territory of India, or income accruing, arising or received within such territory except in case of a trade or business carried on by or on behalf of the Government of any Unit and the personal property or personal income of the Ruler of any State. Besides, taxes on electricity by the Units will not apply to the Central Government and the Central Railways. During the period of an emergency the President will be able to suspend the operation of any or all of the financial provisions of the Constitution relating to the distribution of revenues between the Centre and the Units.

In order to impart a certain amount of flexibility, the Draft Constitution by Article 260 gives power to the President to appoint

periodical Financial Commissions to enquire into and report on the distribution of revenues between the Centre and the Units.

Analysis of Provincial Finances :—A study of Provincial finances discloses that provinces are essentially responsible for expanding nation building and development works. In the past, the provinces' record in this regard has been rather disappointing, if not disquieting. Although in the last Central Budget, a provincial grant of Rs. 64 crores was provided for towards Development Works, the provinces failed to utilise this opportunity on any scale worth mentioning because they could not afford to pay half the cost of any project—this being a condition of the Central grant. The Centre, in consequence, reduced this provision to 41·5 crores subsequently. The inadequacy of provincial finances is easily an outstanding feature.

A perusal of the past Provincial Budgets leaves one with the impression that there lies a great scope for improving provincial finances. On 1948-49 figures, the nine provinces of the Indian Dominion have a current revenue of about Rs. 248 crores, out of which more than Rs. 80 crores are contributed by grants and payments on account of the Income Tax and Jute Duties. This means that the current provincial revenue raised amounts to about Rs. 168 crores, which is very inadequate in view of rising provincial expenses.

The expenditure of Provinces rose by nearly Rs. 177·79 crores since 1938-39, social services having accounted for 26·7 per cent and security services 23·2 per cent. The cost of tax collection increased by about Rs. 9·5 crores, expenditure on debt services Rs. 2·5 crores and irrigation Rs. 5 crores.

Provinces like Bombay, Madras and the United Provinces ploughed their way through in recent years by drawing upon their Post-war Reconstruction Funds, which were built up from past budget surpluses. Total provincial revenues however increased by about Rs. 163·55 crores since 1938-39 and this clearly indicates that provincial budgets are running deficits.

As there is no scope for economising in expenditure and as increased demands on account of social services are likely to be met on an expansive scale, it is urgent that provinces must augment their revenues by increasing the yields of existing taxes and simultaneously explore new sources of revenue.

During 1948-49, the total revenues of nine provinces aggregated to about Rs. 242·77 crores, out of which tax revenue accounted for Rs. 158·51 crores. Customs and Income-tax brought in Rs. 36·30 crores, Land Revenue Rs. 25·51 crores, Excise Rs. 32·22 crores and Stamps etc., Rs. 15·38 crores.

The provincial share of income-tax is at present regulated by the Niemeyer Award and any increase under this head is unlikely, because the position has been left very vague under the New Constitution. It may be recalled that the Constituent Assembly rejected the recommendations of the Sarkar Committee and decided that the provincial share of the income-tax will be determined by an Order-in-Council or an Act of the Legislature according to prevailing conditions.

Income under Land Revenue admits of little scope for expansion. The abolition of the Permanent Settlement is an expensive process and provinces would do well to postpone this for the time being, as finances are very much strained.

The Congress is committed to a policy of prohibition and several provinces have already introduced a big dose of it with concurrent erosion of revenue. In view of their financial stringency and urgent reforms awaiting execution, it will be wiser for them to halt the Prohibition Programme, because it is one of the most fruitful sources of provincial finances. Revenues under stamps etc., are unlikely to show any further increase.

Among tax revenues, provinces rely mainly on Sales Tax and Agricultural Income tax, which are expansive sources of revenue. Sales Tax is expected to yield about Rs. 30 crores in 1949-50 and Agricultural Income Tax Rs. 4 crores. It is rather amazing to observe that the latter is still not imposed in four provinces.

The yield of Sales Tax varies widely amongst provinces. Sales Tax gives a revenue of about Rs. 4 crores in U. P. and Bombay, while Madras derives over Rs. 11 crores from this single source. Sales Tax may be easily regarded as an extremely useful addition to the armouries of provincial taxation because of its elasticity and provinces are relying more and more upon this source for additional revenues.

The West Bengal Government have already proposed to bring about 16 hitherto exempted commodities like newspapers,

mustard oil, hides and skins, fresh fruits, etc., within the scope of Sales Tax. Only two provinces tax urban immovable property. Although the Expert Committee of the Constituent Assembly recognised the province's power to tax professions, callings, trades and employments by proposing an increase of the per capita annual limit of taxation to Rs. 250, only two provinces at present levy this impost.

West Bengal levies betting tax at the rate of 20 per cent, while it is as low as 5 per cent in Ooty. This is an extremely good field, where a substantial revenue can be roped in by levying the tax at a very high rate. There is therefore a large scope for augmenting provincial revenues.

The lack of uniformity is an outstanding feature of provincial tax structures. It has been estimated that the per capita burden of provincial taxation varies from a little over Rs. 2 in Orissa to over Rs. 13 in Bombay. It is no doubt true that provinces are neither equally rich nor do they require additional revenues in equal degrees. Attempts should nevertheless be made to bring about a rational uniformity in provincial finances through mutual co-operation and understanding among provinces.

It is also necessary for provinces to explore the possibilities of increasing their revenues from irrigation, forest and existing State undertakings, which are usually suffering from inefficient management. This at the same time rules out the desirability of extending the scope of nationalisation from the provincial point of view on technical grounds.

The provinces have so far failed to utilise public loans on any worthwhile scale. It has been estimated that the total public debt of provinces is less than Rs. 120 crores and not even equal to half-year's revenues and the total annual interest charges do not exceed Rs. 3 crores for 1948-49. At present provinces depend on loans from the Centre. In 1948-49, provinces were allowed to borrow Rs. 38 crores on easy terms. East Punjab borrowed at $2\frac{7}{8}$ per cent and West Bengal at 2 per cent. This involves unnecessary burdens on the Central Exchequer, whose cash balances are meagre. The provinces are sufficiently solvent to go in for direct loans both in the short-term and long-term markets and should be encouraged to go forward in this direction.

The following table illustrates the growth of provincial revenues and expenditures:—

(In Lakhs of Rupees)

	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	Revised 1946-47	Budget 1947-48
Revenue ...	90,83	97,48	1,07,41	1,24,31	1,63,31	2,08,18	2,29,33	2,43,07	2,60,02
Expenditure	89,22	95,18	1,03,48	1,18,18	1,53,85	2,04,28	2,18,14	2,54,65	2,67,09
Total surplus	2,02	3,21	4,52	6,46	13,04	8,63	11,44	2,27	3,07
Total deficits	41	91	59	33	3,58	4,73	25	13,85	10,14
Net surpuls(+) or deficits(−)	+1,61	+2,30	+3,93	+6,13	+9,46	+3,90	+11,19	−11,58	−7,07

LOCAL FINANCE

Local or Rural Boards :—Provincial Rates or surcharges on land form a substantial part of the revenues of District and Local Boards, representing about 25 per cent of total income in Bombay and 63 per cent in Bihar and Orissa. They were first levied in Bombay and Madras between 1865 and 1869 on land for the construction and repair of roads, upkeep of schools and dispensaries, village sanitation and other local expenditure. The principle followed Lord Mayo's scheme of financial decentralization. Acts were passed in 1871, imposing similar cesses in Bengal, United Provinces and Punjab. In Punjab and Oudh, cesses for roads, schools and the District post, assessed at the time of the land revenue settlement, were continued along with the new general cess. Similar settlement cesses were introduced in Central Provinces, Burma and Assam, but these were subsequently replaced by a general cess. Certain cesses for Imperial purposes were also levied from 1871 to 1905. The Famine Insurance Fund was constituted in 1878, to which were added, in some Provinces, cesses for provincial purposes, mainly for the payment of village officers. The improved Central finances led to the abolition in 1905-6 of all cesses levied for other than local purposes. The funds were transferred to local purposes from provincial Governments in certain cases, the provincial Governments being compensated for from the Central Treasury. There is a recent tendency in some

Provinces either to increase the general rate or to add new cesses for specific local purposes e.g. elementary education. The basis of these local cesses on land differs with the system of land revenue. The cess is levied on the basis of land revenue in the ryotwari areas of Bombay, Madras, Central Provinces and Berar and in the temporarily settled areas of Assam. In United Provinces and Punjab, the annual value is taken with twice the land revenue as the basis. In the permanently settled areas either the rental value or the acreage is accepted as the basis. Regarding the rates of the cesses, they are determined by the local bodies, subject to certain maxima and minima laid down by the Provincial legislatures. The land cesses are collected along with the land revenue. The limits vary from 6 per cent to 12½ per cent. The land cess which is imposed at a flat rate without any regard to the ability to pay is usually popular, because the Local Boards spend their money for the benefit of properties.

Municipal Finance :—The main source of the income of municipalities consists of rates and taxes, which from about two-thirds of the total municipal revenues. The balance is derived from municipal property, contributions out of Provincial revenues and miscellaneous sources. Municipal taxes comprise taxes on trade, e.g. octroi duties, terminal taxes, tolls, etc., taxes on property e.g. taxes on houses and their sites, taxes on persons, e.g. taxes on circumstances, professions, trades and callings, on pilgrims, on menials and domestic servants, etc. and fees and licences. Fees are charged either for specific services performed by the municipality, e.g. scavenging fees, or they are partly of the nature of luxury taxes and partly levied for purposes of regulation e.g. licences for music, vehicles, dogs and other animals, etc. There are licence fees for offensive and dangerous trades.

The municipalities are generally unable to meet their expenditure out of ordinary revenues and they usually borrow money either from the Government or in the open market in order to carry out large projects like water supply, drainage works, etc. Barring the Bombay Corporation with an income of over Rs. 4 crores and Calcutta Corporation Rs. 2⅓ crores, the average municipality in India is rather financially poor. The fact that over 812 municipalities in India had a total income of about Rs. 44,31 lakhs against an expenditure of Rs. 42,32 lakhs in 1939-40 illustrates the normally poor financial condition of these bodies.

Analysis of Resources of Local Bodies :—Although local bodies in India have been entrusted with responsible services, their resources are rather poor due to low taxable capacity of the people and their unwillingness to tax themselves for local purposes. The inequitable distribution of revenues between the Central, Provincial and local authorities also accounts for their scanty finances. The Provincial Governments in India are legally entitled to tax agricultural land and all sources of finances of local bodies are under provincial control. The Provincial Governments have not been able to be of much use to local bodies as they are themselves hard pressed for finances, following expansive services.

In order to improve local finances, the Taxation Enquiry Committee recommended for the standardisation of the land revenue at a low rate to leave better scope for local taxation, transfer to local bodies of a share of the collection of Provincial Governments from ground rents in towns and from an increase in the rates of non-agricultural land, empowering municipalities to tax advertisements, extending the scope of taxes on entertainment and betting and giving local bodies a substantial share of the proceeds, extending and improving the administration of the taxes on circumstances, property and professions, reducing the import duty on motor cars and enabling the Provincial Governments to levy a provincial tax in lieu of tolls for distribution to local bodies, empowering local bodies in selected areas to levy a fee for the registration of marriages. It also suggested supplementing the resources of local authorities by subsidies which should be ordinarily restricted to services of national importance. The local Self-Government Committee appointed by the Government of Bombay endorsed these recommendations. The Bombay Committee held that sources of municipal revenues could be increased by a tax on the transfer of immoveable properties, an assignment of a share of non-agricultural assessment on building plots within municipal limits, taxes on marriages, adoptions and feasts and an assignment of the entertainment tax and of 50 per cent of the revenue derived from a surcharge on electricity. The Committee suggested that local bodies should levy taxes and cesses for definite services rendered e.g. a compulsory education cess. Although there remains a scope for adding to local resources through the extension of municipal trading and enterprises, it

will require the utmost discretion to do so in India, because the efficacy of the sphere of activity depends upon an efficient administration, which is yet to be proved in practice in this country.

It is gratifying to observe that the Government of India have constituted a committee known as the Local Finance Inquiry Committee to inquire into the finances of local bodies and make recommendations for the improvement of local finances.

The Committee will examine:

(*a*) Whether the existing resources are adequate for the performance of the functions assigned to local bodies and consider what further sources of revenue should be provided;

(*b*) methods of Government assistance to local bodies; and

(*c*) existing machinery and methods of assessment and collection of taxes.

The following table illustrates the revenues and expenditures of local bodies in India:—

(In Lakhs of Rupees)

Income (excluding balances)	1915-16	1939-40	Expenditure	1915-16	1939-40
Provincial rates ...	3,39	4,93	Education ...	1,82	6,53
Civil Works ...	1,43	2,24	Civil Works ...	4,16	3,96
Other sources ...	2,68	9,53	Sanitation Hospitals, etc. ...	70	2,21
			Debt and miscellaneous ...	1,32	4,23
TOTAL ...	7,50	16,70			
			TOTAL ...	8,00	16,93
	R. A. P.	R. A. P.			
Incidence per head ...	0 5 1	1 13 3			

Is Taxation High in India?—The Statistical Abstract for

British India (1937-38) gives the following figures bearing on the burden of taxation per head in British India:—

(In Lakhs of Rupees)

	1922-3	1927-8	1933-4	1935-6	1937-8
Total taxation, Central and Provincial (including land revenue)	1,32,79	1,40,18	1,30,79	1,39,37	1,31,93
Payment per head based on Census population in 1931 and assuming that the whole taxation is paid by the inhabitants of British India	Rs. A. P. 5 4 5	Rs. A. P. 5 5 0	Rs. A. P. 4 10 10	Rs. A. P. 4 14 3	Rs. A. P. 4 12 11

Sir Purshottamdas Thakurdas gives the following estimates of the incidence of taxation:—

	Rs. As. P.		Rs. As. P.
1871	1 13 9	1911	2 11 3
1881	2 2 3	1913	2 14 5
1901	2 6 6	1922	6 1 8

The Taxation Enquiry Committee was appointed in 1924 to examine the manner in which the burden of taxation was distributed and to consider inter alia whether the whole scheme of taxation, Central, Provincial and Local, was scientific and equitable. They selected a few typical classes of the population and offered certain tentative conclusions. The Committee found that the burden was oppressive on none of the classes, though its distribution was unequal. Some classes escaped their proper share of taxation, e.g. the landlords and village traders. The poorer section of the community paid taxes in the shape of land revenue, salt tax, excise duties, stamps, etc., while the comparatively rich section escaped their legitimate share of taxation. The changes in taxation during and after World War I rendered the incidence of taxation more equitable by the introduction of a graduated income-tax and super-tax, the levy of special import duties on luxury articles, etc.

The following table was reproduced by Prof. K. T. Shah:—

(In crores of rupees)

Heads of Revenue	Amount of the tax burden borne by	
	the rich strata	the poor strata
Customs	20	21
Land Revenue and Irrigation ...	20½	21½
Income-tax	20	...
Excise	...	20
Salt	1¼	7½
Forests and Registration	2	5
Stamps	6½	6½
Railways	33	60
Post Office	5	5½
Municipal Taxes	3	10
District Board Taxes	...	10
TOTAL ...	111¼	167

Professor Shah concluded that the "economically the weaker and less able section bore pecuniarily the largest proportion of the tax-burdens of India. Allowing for some *quid pro quo* in some of the above items (Railways, Post Office, etc.), we may yet say that while the richer class pays Rs. 100 crores in revenue, the poorer pays Rs. 150 crores, that is, in terms of wealth deduction; while from the average family income of Rs. 1,000 per annum and over, the tax deduction aggregates Rs. 100 crores out of a total of Rs. 600 crores of wealth enjoyed by less than a twenty-fifth of the population, the remainder of Rs. 150 crores is deducted from a total wealth of about Rs. 1,000 or 1,200 crores enjoyed by the 96 per cent of the remaining population. This distribution can scarcely be considered to be either economical or equitable."

The Taxation Enquiry Committee recommended various proposals to redress inequalities, e.g. higher rates of taxation for incomes ranging from Rs. 10,000 to Rs. 25,000; reduction of the exemption limit for the super-tax to Rs. 30,000; a new rate of super-tax; reduction of the exemption limit in the case of a joint Hindu family to Rs. 60,000, etc. They suggested the removal of the duties on kerosene and sugar. They also recommended the levy of excise duties on aerated waters, cigarettes and pipe tobacco, for licensing for country tobacco and an increase in the licence fees for fire-arms, etc.

Although the taxation structure has undergone fundamental changes since the report of the Taxation Enquiry Committee, it

is rather difficult to estimate the burden of taxation owing to lack of statistical data. It is therefore gratifying to observe that the Government of India proposes to appoint a Taxation Enquiry Committee at an early date to investigate the tax system, taxable capacity, etc. "Taxable capacity or fund is measured by the difference between the two quantities—the total quantity of production and the total quantity of consumption." As there is no adequate reliable data regarding production and consumption, it is difficult to assess the taxable capacity in India. Empirically, one is led to believe that taxation has nearly reached the limit. In the field of direct taxation, it is found that the country is suffering from lack of capital formation and savings have dried up and the following tables illustrate the position:—

TABLE I

INDIVIDUAL SAVINGS FROM TAXABLE INCOMES, 1945-46.

Income Group (Yearly Income) (in Rs. 000)	No.'s Assessed (thousands)	Income Assessed (Rs. crores)	Net Income after Income & Super Tax (Rs. crores	Saving per cent of net Income	Savings (Rs. crores)
Below 10 ...	344·5	136	132	7·5	9·9
10 to 20 ...	33·6	40	37	12·5	4·6
20 to 25 ...	24·8	46	42	17·5	7·4
25 to 50 ...	13·8	46	39	25·5	9·8
50 to 100 ...	3·4	23	18	33·5	6·0
100 to 200 ...	1·1	14	10	50	5·0
200	0·5	21	12	70	8·4
	421·7	326	290		51·1

TABLE II

INDIVIDUAL SAVINGS FROM TAXABLE INCOMES TO-DAY.

Income Group (Yearly Income) (in Rs. 000)	No.'s Assessed (thousands)	Income Assessed (Rs. crores)	Net Income after Income & Super Tax (Rs. crores)	Saving per cent of net Income	Savings (Rs. crores)
All below 25 ...	—	—	—	Nil	Nil
25 to 50 ...	13·8	46	39	5	2·0
50 to 100 ...	3·4	23	18	13·2	2·4
100 to 200 ...	1·1	14	10	30	3·0
200	0·5	21	12	50	6·0
	18·8	104	69		13·4

Indirect taxation has also nearly reached the point of diminishing returns. The masses are already feeling the pinch of high prices and the high taxation of luxury goods is already exhibiting signs of diminishing consumption.

It is sometimes erroneously argued that because the per capita incidence of taxation in India bears a lower ratio about 8 per cent to the income per head, therefore the burden of taxation is light, compared to Great Britain, where the proportion of national income absorbed by taxation aggregates about 50 per cent. As a matter of fact, a high percentage of taxation on a large national income presses on the people less heavily than a low rate on a low income.

Public Debt in India :—India's public debt began from the period of the East India Company, which incurred loans to wage wars and the total debt rose from £7 millions in 1792 to £59½ millions in 1856-57 and £60⅓ millions in 1857-58. The total debt aggregated to over £100 millions by 1860. The Government of India took over all responsibilities of these debts from the East India Company in 1858 with the cessation of the Company's rule and in addition committed themselves to pay the dividend on £12 millions stock of the East India Company, which was however redeemed in 1874. The entire debt inherited from the East India Company was unproductive. From 1867, the Government started to borrow for public works like railways, irrigation, etc., and loans incurred for these purposes were regarded as productive or Public Works debt as distinct from the previous unproductive debts, which were popularly known as Ordinary debt. On the recommendation of the Select Committee of 1878, the Government initiated the practice of utilising Government surpluses for constructing public works and railways and paying off the old unproductive debts. This policy was criticised by Mr. Gokhale, who urged for the utilisation of surpluses towards giving reliefs in taxation.

It may be observed that up to the World War I, the major portion of the public debt was raised in England as it was contended that the rates of interest were cheaper in England than in India. The potentialities of the Indian money market were appreciated during World War I, when it was difficult to raise money in England and the Government was obliged to borrow inside the country. During the war period 1914-18, the ordinary

debt rose from Rs. 3·1 crores in 1916 to Rs. 257·70 crores in 1924 and War Loans were extensively subscribed in India. The amount of War Loans aggregated Rs. 53 crores in 1917 and Rs. 57 crores in 1918. The World War I gave an opportunity to tap all categories of investors. Notable among them were the Post Office Branch of the War Loans and the system of cash certificates. The Government also initiated the system of Treasury Bills, which have become a popular feature of Central finances since then.

The Indian Defence Savings movement was inaugurated early in June, 1940 with the issue of 3 per cent six-year Defence Bonds, ten-year Defence Savings Certificates and Interest-Free Bonds. The six-year Defence Bonds were the mainstay of the War Loan programme of the Government and subscriptions totalled nearly Rs. 45 crores, 31½ crores being tendered in cash and the balance by conversion of the 5 per cent Loan (1940-3). From 1st February, 1941, a second 3 per cent Defence Loan with a longer currency and repayable at par was issued in place of the six-year Defence Bonds. The subscriptions to the Defence Loans during 1942-3 aggregated Rs. 115 crores. Then there were a third and a fourth Defence Loans and several other loans which yielded a total of Rs. 279 crores during 1943-4. A Defence Savings Provident Fund for all Government servants was initiated in order to enable these classes to make regular investments. A popular savings scheme was started by means of Post Office Defence Savings Bank Accounts, the amounts in which were repayable not on demand but a year after the end of the war. The rate of interest was fixed at 1 per cent higher than the existing rate on ordinary Postal Savings Banks Accounts.

The total regular interest-bearing debt on 31st March, 1939 aggregated Rs. 1,158 crores, comprising Sterling loans and Railway Annuities Rs. 445 crores, Rupee loan and Treasury Bills Rs. 484 crores, and Unfunded debt (Cash Certificates, Savings Bank Deposits and Provident Funds) Rs. 229 crores.

The debt position of a country is a sure index of its financial strength and our position is inherently sound. At the end of 1948-49 the total outstanding public debt was about Rs. 1,795 crores and to rise by a further Rs. 56 crores during next year to Rs. 1,851 crores. The total of the interest bearing obligations was estimated at Rs. 2,182 crores at the end of 1948-49 and Rs. 2,231 crores at the end of 1949-50. Against these obligations, we expect

to have at the end of 1948-49 roughly Rs. 1,161 crores and at the end of 1949-50 Rs. 1,237 crores by way of interest yielding assets representing the investments in the two great commercial departments of the Government, namely, the Railways and Posts and Telegraphs, outstanding amounts due to us from the Provincial Governments, Indian States, Burma and others, and the probable debt of Pakistan to us. In addition, we shall be holding cash and other investments on treasury account amounting to Rs. 246 crores at the end of 1948-49 and Rs. 130 crores at the end of 1949-50. The total interest bearing obligations not covered by interest bearing assets and our cash and interest yielding investments would thus amount to no more than Rs. 775 crores at the end of 1948-49 and Rs. 864 at the end of 1949-50. These figures are to some extent approximate and it is not possible to give precise figures until Pakistan's share of the obligations which she would assume direct and her debt to India have been finally worked out.

The debt burden is to be judged primarily by the size of the deadweight debt. The amount of deadweight debt estimated at Rs. 864 crores is indeed very small when compared with the resources of the country and the national income. The debt position may be compared with the national income for assessing whether the debt is one which the country, can afford to carry. For this purpose, we may take the whole of the interest bearing obligations of the Government of India which are expected to stand at Rs. 2,231 crores at the end of 1949-50. Unfortunately, we have no accurate data regarding the national income of our country. Various estimates have been made from time to time, but none of them has been made on a really accurate and scientific basis and our national income may be assumed at about 4,500 crores of rupees. Our public debt is less than half of our national income. It is interesting to compare our position with that of more advanced countries like the United Kingdom and the United States. The national debt in the United States is more than 1½ times its national income and the national debt of the United Kingdom is nearly three times its national income. The burden of the debt may also be assessed in another manner by studying the interest charges in relation to the annual revenue. For the year 1948-49 our gross payment of interest changes amounted to Rs. 61·82 crores. From our Commercial

Departments like Railways, Posts and Telegraphs, etc., and by way of interest receipts from Provincial Governments and other sources we obtained about Rs. 25·66 crores. The net interest payment therefore was Rs. 36·16 crores. From this must again be deducted the interest due to us from Pakistan which was estimated at approximately 9 crores of rupees. Our net interest burden was therefore about Rs. 27 crores. The anticipated revenue was Rs. 256·28 crores. Our net interest payment therefore represents only about 10½ per cent of our revenue. The inference that may legitimately be drawn from these figures is that we could carry even a larger volume of debt and that there is still a large source available here for financing the development of the country.

The Redemption of Debts :—There was no clear-cut debt redemption policy until 1924 and debts were repaid in two ways. The surpluses were utilised for financing capital expenditure on productive works and reducing the ordinary debt.

A portion of the liability incurred in connection with the purchase of certain railways, was and is being reduced under the statutory obligation of payment of railway annuities, issued in repayment of both principal and interest on loans. The India Stock, for which the shareholders of railways were permitted to exchange their annuities and the securities of the original companies from which the railways were purchased, is being reduced from certain sinking funds shown under railway account. A sinking fund was established during 1914-18 in connexion with the issue of the 5 per cent War Loan of 1917. The Government decided to set aside 1½ per cent of the loan for the purchase and cancellation of the loan securities, as long as their market price was below the issue price in addition to making annual provision of nearly £500,000 to meet India's liability regarding unpaid portion of the war contribution.

A regular debt redemption scheme was accepted by the Assembly in December, 1924 on the initiative of Sir Basil Blackett, who suggested that the best way of arriving at a regular programme of debt redemption was to take the gross total of the debt, examine the capital assets held against it and fix the appropriate period within which it is desirable to amortize each category of debt. Accordingly, the Finance Member announced a scheme on 9th December, 1924, which provided for a period of five years in the first instance, an annual provision for the reduc-

tion or avoidance of debt to be charged against annual revenues of Rs. 4 crores a year plus 1/80th of the excess of the debt outstanding at the end of each year over the outstanding on 31st March, 1923, sterling debt being converted into rupees at Rs. 15 per £ for this purpose. The provision for the sinking funds thus proposed would be used not to reduce the net total debt as long as there was a considerable annual programme of new capital expenditure, but to reduce the unproductive portion of it. The provision was therefore better described as a contribution out of revenues for the reduction or avoidance of debt than as a sinking fund. Provision was also made from 1930 to meet the accruing liability regarding Cash Certificates, which were henceforth regarded as part of the Government's debt. It was decided in 1930-31 that the sterling debt should be converted into rupees at Rs. 13⅓ per £ instead of Rs. 15 per £. From 1933-4 the annual amount provided for the reduction or avoidance of debt was reduced to a lump sum of Rs. 3 crores. As 60 per cent of the Government of India debt was attributable to the railways, it would be imposing a heavy burden on the General Budget to revert to the Sinking Fund arrangements in force prior to 1933-4 before the railways had resumed the practice of making a contribution to the General Revenues.

Repatriation of Sterling Debt :—The process of the repatriation of sterling debt began from 1937, but it had to be temporarily discontinued owing to the slackening of sterling remittances. Substantial sterling resources became available after the beginning of the World War II due to recoveries from His Majesty's Government for their share of war expenditure incurred by India as well as for large purchases of raw materials and goods paid for in the first instance by the Government of India, contributions towards the expenditure on defence modernisation according to the Report of the Chatfield Committee and sterling receipts for sales of silver in London on behalf of the Government of India and this accelerated the process of the repatriation of the sterling debt. The Reserve Bank was therefore authorised to purchase India sterling non-terminable securities in the open market and to transfer them to the Government of India for cancellation. Additional Rupee Paper of 3½ and 3 per cent non-terminable loans was also created. A further scheme of repatriation of sterling was introduced in February, 1940, extending the

option of transfer to holders of all India Sterling Loans to Rupee Loans and sanctioning the creation of rupee counterparts for six specified dated sterling loans. Owners of sterling obligations could therefore voluntarily convert their holdings from the books of the Bank of England into rupee counterparts registered in the books of any one of the Reserve Bank offices in India. Open market purchases were also made in London by the Reserve Bank of India, which aggregated £28½ millions on 8th February, 1941.

An announcement was also made on the same day for the compulsory acquisition and repatriation of India's terminable sterling debt amounting to about £90 millions or Rs. 120 crores and the British Government helped the Government of India by issuing orders under their special war powers compelling holders resident in the United Kingdom to sell their stocks to them for delivery to the Government of India at market prices prevailing at the time of the order, dispensing thereby with the expensive alternative of buying them in a rising market. A similar order was issued by the Government of India affecting holders of sterling stocks who were residing in India. The Government of India first bought the sterling from the Reserve Bank by arranging for the rupees to pay for the sterling. The Reserve Bank of India utilised a portion of its large stock of sterling securities and balances for purchasing India's sterling debt. The total face value of the outstanding terminable loan on 8th February, 1941 was about £84 millions. Holdings of India sterling stock compulsorily acquired in the United Kingdom and India aggregated £59 millions and £11 millions respectively. The balance of about £14 millions represented stocks, held by non-residents outside the United Kingdom and India. The half of the stocks thus acquired was paid for by the issue of rupee counterparts to the Reserve Bank and half from balances with the aid of temporary ways and means advances from the Bank.

The second compulsory scheme was implemented in practice by the redemption of 3½ per cent sterling stock during 1942-3. The total debt repatriated between 1st April, 1937 and 31st March, 1943 was shown at £307·26 millions and was partly financed by creating rupee counterparts of about Rs. 234·97 crores. The Government of India sterling stock and railway debentures bought and cancelled by Government balances totalled £3 millions in 1943-44. In addition the Madras and Southern Maharatta,

South Indian and Bengal-Nagpur Railways were acquired at a cost of £5·28 millions, £1·11 millions and £3·60 millions respectively. During 1945-6 stray lots of the face value of £0·28 million were repatriated at a cost of Rs. 37 lakhs and during 1946-7 £0·76 million at a cost of Rs. 1·06 crores.

The following table illustrates the position of Repatriated Sterling Debt:—

AMOUNTS OF STERLING DEBT REPATRIATED SINCE 1937-8

Year	Face Value £ (million)	Purchase Value		Rupee counterparts created Rs. (crores)
		£ (million)	Rs. (crores)	
1937-8	2·99	3·04	4·05	1·12
1939-40	17·09	16·54	22·05	22·79
1940-1	71·29	75·24	100·32	94·86
1941-2	99·04	92·28	123·04	33·58
1942-3	119·00	120·48	161·67	82·62
1943-4	13·02	12·97	17·29	38·42
1944-5	0·41	0·37	0·49	0·17
1945-6	0·28	0·29	0·37	0·01
TOTAL ...	323·12	321·21	429·28	273·57
1946-7				
(1) First compulsory scheme of 8 February, 1941 (including special arrangements)	0·49	0·55	0·73	0·01
(2) Second compulsory scheme of 24 Dec., 1941 (including special arrangements)	0·19	0·17	0·23	...
(3) Redemption of 3½ per cent sterling stock 1931 and after	0·07	0·07	0·09	...
(4) Repatriation of Railway debenture stocks	0·01	0·01	0·01	...
TOTAL ...	0·76	0·80	1·06	...
GRAND TOTAL ...	323·88	322·01	430·34	273·58

Sterling Balances of India :—India always held sterling in the United Kingdom as part of her currency reserve and in

September, 1939 the sterling balances totalled £52 millions. The figure rose to £1,137 millions on 14th August, 1947. This accumulation followed the purchase of stores and other materials from India on behalf of the British Government and the Allied countries for war purposes. The British Government paid for its purchases in India in sterling in London, which was transferred to the Reserve Bank, which issued currency notes against the same.

In order to repay India's sterling balances, an Interim Agreement was made on 14th August, 1947, between the Governments of India and the United Kingdom to cover the period up to 31st December, 1947. Among others it was decided that the balances of the Reserve Bank of India were to be kept in two accounts. No. 1 Account was to be the main operative account and to contain the multilaterally convertible currency. To this account were to be credited the amounts released from the accumulated balances and all future current earnings. No. 2 Account was to hold the remainder of the accumulated balances. A sum of £35 millions was to be transferred to the credit of Account No. 1. This amount was designed to meet the estimated deficit in India's balance of payments on current account from 15th July to 31st December, 1947. A further amount of £30 millions was to be placed to the credit of Account No. 1 as a working balance to be used to meet any temporary deficit in India's available means of payment abroad.

This agreement was renewed in January, 1948, subject to minor changes for a further period of six months. As the agreement was to terminate in June, 1948, a new agreement was signed on 9th July, 1948. The following were the main features: A sum of £100 millions or Rs. 133 crores to be paid in full and final settlement for all the stores and installations taken over on 1st April, 1947; the United Kingdom Government to be paid a sum of £147½ millions or Rs. 197 crores and India to purchase from them a tapering annuity beginning with £6,300,000 in 1948 to disappear completely in 60 years. The annual liability is of the order of £6¼ millions or Rs. 8 crores. The payment of sterling pensions to be met by the capital payment from the sterling balances. The liability of the provinces in India is of the order of a little under a million pounds a year or Rs. 1¼ crores and it was agreed to purchase a similar annuity regarding these pensions. The payment on this account was to be £20½ millions or Rs. 27 crores;

the final accounts of the undivided Government of India for 1946-7 showed that a sum of £49 millions or Rs. 65 crores remained due from the United Kingdom under the plan for the allocation of defence expenditure between the two countries. Certain liabilities still remained to be met and after allowing for these, the final amount was fixed at £65 millions or Rs. 73 crores; during the period of three years from 1st July, 1948, the U. K. was to release a sum of £80 millions, in addition to which India was to carry forward an unspent balance in account No. 1 of £80 millions out of the previous releases.

The total sterling balances were shown at £1,160 millions and the amount estimated at £800 millions remaining after payment for the military stores and installations and the purchase of annuities for pensions and the transfer of Pakistan's share to her would be available for meeting the country's requirements of foreign exchange. In 1948, a sum of £15 millions or Rs. 20 crores was to be made available for the first year, at the end of which the position was to be reviewed.

Under the Indo-British Sterling Balances Agreement for 1948-49, it was agreed that India would draw £80 millions for the period ending June, 1949, besides £80 millions outstanding from the previous agreement. India's withdrawals until the end of April, 1949, however, exceeded the specified amount by £40 millions —due mainly to abnormal imports. This heavy drawing was viewed with concern and it appeared that further withdrawals would be difficult for some time. Therefore fresh negotiations are now taking place in London. It may be observed here that in the current year ended 31st March, 1949, India also drew from the International Monetary Fund nearly 100 million dollars, the amount being available as loan.

Analysis of the Pakistan Budget of 1949-50 :—Revenues were estimated for 1949-50 at Rs. 70·25 crores against Rs. 58·70 crores in the previous year and these estimates included the net receipts of the Railway and the Posts and Telegraphs Departments after allowing for their working expenses. There was an improvement of Rs. 4·5 crores under Central Sales Tax, which was introduced from 1st April, 1948. The sales tax in Pakistan has been centralised, by arranging to pay the provinces half of the total collections in their respective areas minus the costs of collection.

Excluding the working expenses of the Railways and the Posts and Telegraphs Departments, expenditure was estimated at Rs. 69·26 crores, thus leaving a surplus of Rs. 99 lakhs. After taking into account the cost of of the implementation of the recommendations of the Pay Commission, the surplus was converted into a deficit of Rs. 3·01 crores, which was covered by additional taxation, leaving a surplus of Rs. 226 lakhs. The budgetary position is summarised as follows:—

BUDGET ESTIMATES FOR 1949-50 (*In crores of Rupees*)

Receipts:		*Percentage to Total.*
Customs	28·00 crores	39·9
Central Excises ...	5·55 „	7·9
Income and Corporation Taxes	9·00 „	12·8
Sales Tax	8·00 „	11·4
Salt	3·65 „	5·2

(Total Revenues estimated at Rs. 70·25 crores).

Expenditures:		*Percentage to Total.*
Civil Expenditure ...	22·04 crores	31·8
Defence Service ...	47·22 „	68·2

(Total Expenditures estimated at Rs. 69·26 crores).

The budget increased the import duty on manufactured tobacco to Rs. 16-4-0 per lb., making similar increases in the duties on cigars and cigarettes, and to increase by 15 per cent. ad valorem the existing import duties on fabrics made of silk, fabrics containing gold or silver thread, articles plated with gold or silver and certain other luxury items. Import duties are collected on non-essential imports from India. Exemptions include all cotton piecegoods whose value is less than Rs. 1-8-0 per yard. Thus all except the most expensive varieties of cotton cloth continue to be imported free of duty, and there should be no increase in the sale price of the types of cloth which are mainly used by the poorer classes. Even in the case of cotton cloth whose value is more than Rs. 1-8-0 per yard it was proposed for the present to apply only the preferential rates of duty, which range from 15 to

21 per cent. ad valorem. It was also proposed to apply only the preferential rates to artificial silks and certain other fabrics. Tobacco manufactures are another class of goods which are liable to reduced rates of duty on import from India. It was proposed to charge 10 per cent. ad valorem on biris, 15 per cent. on the cheaper qualities of cigarettes and 20 per cent. on other tobacco products of Indian manufacture.

As regards the export tariff, it was proposed to levy small export duties on cement, fish and bamboos. In the case of cement the duty is at the rate of Rs. 10 per ton. The duties on fish are Rs. 5 per maund for fresh fish, Rs. 8 per cwt. for dried fish, unsalted, and Rs. 4 per cwt. for dried fish, salted. The duty on bamboos is charged at the rate of 10 per cent ad valorem.

The rate of direct taxation remains unchanged at equal to Indian rates, but the taxable minimum for income-tax was increased from Rs. 2,500 to Rs. 3,000. Additional concessions were given regarding depreciation on machinery and plant used in industrial undertakings in Pakistan. Import duties on machinery were reduced from 10 to 5 per cent. and import duties on iron and copper scrap were remitted, one anna being taken off the kerosene duty. The export duty on sheep and goatskins was reduced from 10 per cent. to 5 per cent.

The Working of Pakistan Railways :—Pakistan Railways registered a loss of Rs. 1·87 crores for the period 15th August, 1947 to 31st March, 1948 against the loss of Rs. 1·5 crores assumed in the estimates for that period. Conditions, however, soon began to improve in many directions and the total gross earnings for the current year were placed at Rs. 33·38 crores against Rs. 32·59 crores originally estimated. With the working expenses at 32·58 crores, it is expected that the anticipated nominal surplus of Rs. 3,000 will be converted into a surplus of Rs. 79·5 lakhs. This improvement has been rendered possible by the exercise of strict economy in operational expenditure, and increase in receipts resulting from larger traffic and due to revision of rates and fares and stricter check of ticketless travel. Traffic earnings are expected to show a further improvement during 1949-50 and gross receipts in the year are estimated at Rs. 34·5 crores whereas working expenses would be Rs. 33·5 crores. The year is thus expected to show a surplus of Rs. 1 crore which will be converted into a deficit of Rs. 82 lakhs on implementation of the Pay Commission's recom-

mendations. Considering that these surpluses cover the increased costs of coal and the loss of about Rs. 1·25 crores per annum that used to be incurred on the running of the "strategic lines" and that the Eastern Bengal Railway continues to run at a deficit, these figures are not so unsatisfactory and bring out the fact that the commercial lines as a whole are not running at a loss. Further the Railways are carrying a large number of surplus staff. It is hoped that with the adjustment of surplus staff and the exercise of economy the picture that is likely to emerge this time next year will be more satisfactory.

The Budget Estimates for the year 1948-49 include a provision of Rs. 5·5 crores for works chargeable to Capital and to the Depreciation Fund. Due mainly to non-availability of materials, which are still in short supply, the progress of work has however been slower than was originally anticipated and the revised estimates for these works are now placed at Rs. 4·19 crores. A provision of Rs. 5·13 crores has been made for the works programme during the year 1949-50. Of this amount, a sum of Rs. 1·6 crores will be chargeable to Capital and Rs. 3·44 crores to the Depreciation Fund.

The year 1948-49 saw an addition of three lines to the existing Railway system. The Sind Section of the Jodhpur Railway has been taken over by the North-Western Railway, while the East Bengal Railway purchased the Khulna Bagerhat Light Railway and the Mymensing-Bhairab Bazar Railway. The survey of a suburban Railway for Karachi has been completed by the North-Western Railway. On the Eastern Bengal Railway side, surveys of Jessore-Darsana and Dacca-Aricha Sections have been sanctioned. Preliminary arrangements for starting land acquisition and earthwork on the Jessore-Kalighat Section of the Jessore-Darsana project have been taken in hand. Doubling of the track in the Akhaura-Bhairab Bazar Section of the Eastern Bengal Railway is also progressing. The Saidpur workshop is being remodelled to meet the additional broad-gauge repair requirements, while the Pahartali workshop is being rehabilitated to carry out meter gauge repairs displaced from Saidpur due to the increase in load.

While the general position of the working of the Pakistan Railways continues on the whole to be somewhat reassuring, the working of the East Bengal Railway has been far from satisfactory.

This Railway registered a loss of Rs. 1·45 crores in 1947-48 and is likely to show losses of Rs. 1·39 crores and Rs. 48·31 lakhs in the current and the next financial years.

Financial Relations between Centre and Provinces :— The chief instrument for the regulation of financial relations between the centre and the provinces was the Niemeyer Award, but in view of the fact that the conditions on which the Award was based were no longer operating in Pakistan, it was modified as follows:

1. It was decided that the Centre should retain the entire share of the income-tax receipts for the time being.
2. Sales tax which was a provincial tax was centralised, and the provinces agreed to hand it over to the Central Government for a period of two years subject to a portion of receipts being remitted to the provinces on an agreed basis.
3. Finally, the proceeds of the estate duties when imposed would be wholly left to the Centre.

The Centre, however, continued to give the annual subvention of Rs. 1,00,00,000 to the North-West Frontier Province. The Centre has also been giving liberal loans to the provinces.

Although it has been decided to allocate to provinces half of total sales tax collected in their territories minus the cost of collection, the final allocation of revenues between the Centre and Provinces remains as yet in a nebulous state. The Government of Eastern Pakistan is demanding the full proceeds of the jute duty and a portion of the income-tax collected in its territory and negotiations are proceeding in these matters.

Public Debt of Pakistan :—It is difficult to assess accurately the public debt of Pakistan, because the portion of the debt of undivided India to be transferred to Pakistan has not yet been finally settled.

The position of the undivided Government as on the date of partition was that its outstanding liabilities exceeded its assets so that ultimately it is the debt that is being divided between the two Governments. On a rough estimate the outstanding debt of the Central Government as on the 14th August, 1947, including in this not merely the outstanding public debt but all its obligations to outside parties such as deposits in Postal Savings Banks, outstanding balances of Post Office Cash and National Savings Certificates, Provident Fund Deposits of Government servants, the

amounts likely to be paid to the British Government for surplus stores and other property acquired by the Defence Services and the capitalised value of the liability for pensions in payment on the date of partition and pensions earned by serving officers up to that date, is likely to be of the order of Rs. 3,300 crores.

The Government of India's assets on that date are represented by the capital spent on the great Commercial Departments like the Railways and the Posts and Telegraphs, the Security Printing Press, the Irrigation works in the Centrally Administered areas, the Port of Vizagapatam and New Delhi; the buildings, stores and equipment of the Defence Services and the various branches of the Civil Administration; the cash balance with the Reserve Bank and investments such as the Silver Redemption Reserve and the subscriptions to the International Monetary Fund and the International Bank; and the miscellaneous debts due to it such as the outstanding loans made to Provincial Governments and local bodies and institutions. The total value of these assets is of the order of Rs. 2,800 crores leaving a net excess of liabilities over assets of about 500 crores. It will be some time before the final figures are available and the machinery for obtaining them as early as possible is being set in motion. The arrangement with Pakistan is that for all assets located in her territory such as the Railways and the Posts and Telegraphs system operating in Pakistan, the stores and other movable equipment allocated to her, the administrative buildings and installations taken over by her territory she takes a debt equal to the book value of these assets. An exception has been made in the case of strategic railways the book value of which, for purposes of the settlement, will be written down from a little over Rs. 32 crores to Rs. 14·45 crores. In addition, Pakistan will take over a debt equal to the amount of the cash balance of Rs. 75 crores allocated to her out of the cash balances of the undivided Government and 17½ per cent. of the net excess of the Central Government's liabilities over assets which is likely to be of the order of Rs. 500 crores. The total of Pakistan's debt as calculated above will be reduced by the liability she takes over direct in regard to Postal Savings Banks, Postal Cash and National Savings Certificates outstanding in her area, the pensions of the undivided Government paid in Pakistan and the liability for pensions earned by officers who have opted for service in that Dominion. For purposes of the financial settle-

ment the outstanding debt of the Central Government will be valued after taking into account the interest payments, discounts, the date of redemption and so on. Similarly the acturial value of the pensionary liability will have to be calculated. The closing of the accounts for the pre-partition period, without which the outstanding assets and liabilities cannot be determined, will also take some time to complete. It is not therefore possible to give anything more than a very rough indication of the amounts involved in the settlement or the share of Pakistan in the outstanding debt. Pakistan's share will take the form of an inter-state debt to India. On a very rough estimate this debt is likely to be of the order of Rs. 300 crores, and the rate of interest may be near about 3 per cent. Pakistan's total debt is to be repaid in Indian rupees in fifty annual equated instalments for principal and interest. As a measure of assistance to the new Dominion in its earlier years it has been agreed that the first repayment should commence only in 1952. In addition to the Rs. 75 crores given to her out of the cash balance of the undivided Government it has also been agreed that India would make available to Pakistan a further sum of Rs. 6 crores for meeting the expenditure on the setting up of Ordnance factories and similar special institutions required by her. This amount will also be added to Pakistan's debt.

The following table illustrates the permanent debt incurred by the Government of Pakistan since its inception.

Permanent debt	*Amount subscribed (In lakhs of Rs.)*
Details of Loans:—	
2¾% Loan, 1953-54	31,89
3 % Loan, 1960	12,73
3 % Loan, 1968	4,36
2¾% Loan, 1955-56	11,85
2¾% Loan, 1958-59	6,76
3 % Loan, 1963	2,89
1½% Loan Free Bonds, 1958	9
TOTAL ...	70,57

It may be observed that these different categories of loans have provided institutional investors with a wide choice and will help

the development of a gilt-edged market. Although a stock exchange has been formed in Karachi it has not yet started functioning and it is anticipated that it will be able to begin with a fairly good gilt-edged section.

In order to provide the money market with short-term investments, the Central Government issued three months' Treasury Bills for the first time in June, 1948. Due to the large demand for short term investments, the fortnightly tender for Rs. 25 lakhs was made weekly, the weekly tender being subsequently raised first, to Rs. 50 lakhs and then to Rs 1 crore. The weekly auction of the Treasury Bills was continued upto the first week of November, 1948, then it was suspended due to the pressure on the money market caused by the seasonal financing of cotton and jute crops. During the period, the total amount offered for sale and accepted was Rs. 10·50 crores against Rs. 37·7 crores tendered for acceptance, the average rate of interest for accepted tenders being annas 0-7-2 per cent. The successful floatation of Treasury Bills gave further evidence of the confidence reposed by the market in the strength and stability of country's finances. Ad hoc Treasury Bills aggregating Rs. 10,89 crores were also created during the year to finance the scheme for the funding of the Sterling Pensionary obligations. The outstanding balance of Treasury Bills at the end of 1948-49 is estimated at Rs. 11·29 crores.

Economy Committee of Pakistan :—The Committee recommended economies amounting to about Rs. 37 lakhs in a full year, of which Rs. 23 lakhs is represented by the cost of the Resettlement Department and its employment exchanges. The Committee recommended that these exchanges should be handed over to the provinces in whose sphere of responsibility they really lie and that it should be for the Provincial Governments to decide if their continuance is necessary. The suggestions of this Committee have been given careful consideration by the Government and although decisions have not yet been taken on all points it is expected that the Government will be able to effect savings of at least Rs. 33 lakhs per annum in Central Expenditure, including 23 lakhs on the Resettlement Department.

Sterling Balances of Pakistan :—The Anglo-Pakistani Sterling Balances Agreement negotiated earlier provided for the

release of Pakistani balances on a six-monthly basis and for six months ended 30th June, 1948, the results indicated that Pakistan's earnings of sterling exceeded her expenditure by Rs. 21 crores. This was inevitable as the period under review was one of unprecedented exports of jute and cotton. The operation of the system of six monthly releases was not found to be satisfactory as it did not permit of advance planning. The fresh Agreement with the Government of the United Kingdom, which was negotiated in London in summer 1948, provided for releases being made on an annual basis. The main terms of this Agreement were that for the year ending June, 1949, a sum of £5 millions was released for current transactions and provision was also made for the further transfer of another £5 millions for making essential purchases for the resettlement and rehabilitation of refugees. This sum would continue to be available up to the end of June, 1951. From within the balances available in the No. 1 Account, the U.K. Government agreed to make the equivalent of a sum of £5 millions available to Pakistan in hard currencies for the year ending June, 1949. In order to enable Pakistan to prepare plans in advance, the U.K. Government gave an undertaking that, in addition to the balances existing in Pakistan's No. 1 Account, further sums of at least £5 millions would be released during each of the two years ending in June, 1950 and 1951.

Complete agreement was also reached in regard to Defence Stores and Installation built or acquired by the U.K. Government in undivided India during war-time. The amount payable to the U.K. on this account was assessed at £100 millions. It was agreed between India and Pakistan that the initial payment for these assets would be made to the U.K. Government by India and the value of Defence Stores in Pakistan and of U.K. stores either located in Pakistan on the day of partition or transferred to it by India in accordance with partition arrangements would be reimbursed by Pakistan to India in blocked sterling. As part of these arrangements, it was also agreed that a share of the recoverable war expenditure payable to undivided India should be refunded by the U.K. Government directly to Pakistan and she would receive in blocked sterling a sum of about Rs. 11 crores on this account during 1948-49. In regard to Sterling Pensions payable by the Pakistan Central and Provincial Governments, it was

agreed that an amount in blocked sterling equivalent to Rs. 10·89 crores should be funded with H.M.G. in return for which that Government would make available to the Pakistan Government sterling annuities during the next fifty years to enable pensionary and provident fund liabilities being met from year to year. This arrangement for the utilisation of a portion of Pakistan's blocked sterling should, on the whole, be regarded as satisfactory, particularly, as the amount funded carries interest at 1 per cent which is slightly higher than the rate of interest earned by the Sterling balances.

The extension of the Anglo-Pakistani financial agreement and the amounts to be released from Pakistan's sterling balances after 30th June, 1949, were discussed recently between the U.K. and Pakistani delegations. It was arranged that Pakistan would obtain a release of another £10 millions from her blocked balances of about £156 millions. She is reported to have used the £15 millions received last year for the period ending on June 30 of 1949. Pakistan requested that it be agreed by Britain that Pakistan can convert £10 millions, when released, into dollars for purchasing capital goods from hard currency areas.

CHAPTER XXIV

INFLATION, PRICE CONTROLS AND FAMINES

Inflation in India

Inflation has become almost a household word in India. People instinctively understand by it a state of condition in which they live at present. Everybody finds it extremely hard to make two ends meet, because prices of all commodities continually rise and in spite of best efforts, expenditure always lags behind income.

This is no doubt a correct appraisal of the present inflationary situation, although inflation is really a monetary nomenclature. Inflation implies an economic condition in which the total volume of money exceeds the available supply of goods. Under such circumstances, prices of commodities will naturally rise and to-day we find that price rises are distinctly apparent in all sectors of our economic life. This may now be illustrated from price structures as prevailing in our country.

The index number of wholesale prices of food is shown at 306·1 in 1947-48 with 1939 August base equal to 100, industrial raw materials 377·5, semi-manufactured articles 261·6, manufactured articles 286·4, miscellaneous articles 456·2. The combined general index therefore comes to 308·2. Or in other words, it is clear that wholesale prices of all commodities have risen by over 200 per cent as compared with the pre-war period of 1939.

Similarly the index number of retail prices in rural areas of food stands at 166·3 in 1947-48 with 1944 base equal to 100, fuel and lighting 119·3, clothing 109 and miscellaneous articles 128. Even in rural centres prices of commodities must have gone up by cent per cent as compared with the pre-war period of 1939.

An examination of the details of prices of certain important articles will be rather useful. We shall now mention the prices of these articles as they were found in 1947, having taken the corresponding prices of all the items to be 100 in August, 1939. Rice 333, Wheat 373, Tea 246, Coffee 342, Sugar 212, Tobacco 692, Cotton 194, Raw Jute 412, Linseed 428, Pig Iron 117, Coal 374,

Raw Wool 277, Hides and Raw Skins 205, Kerosene 147, Petrol 166, Cotton Manufactures 262, Jute Manufactures 503, Cement 197, Galvanized Corrugated sheets 229 and Leather 317.

These big increases in prices of articles have naturally meant great hardships. As incomes of the general masses could not rise proportionately everyone is feeling the pinch. How living expenses have mounted up will be illustrated if we look at the cost of living index figures.

The middle class cost of living index in Calcutta shows a rise from 100 in August, 1939 to 333 to-day. The expenditure on food increased by over 300 per cent, fuel and lighting cent per cent, clothing 200 per cent and miscellaneous about cent per cent. Similar rises have occurred throughout India.

The present cost of living index of a worker in Bombay stands at 307 against 100 in 1939 August, Ahmedabad 336, Sholapur 412, Kanpur 462, Nagpur 379, Jubbulpore 404, Madras 312, Delhi 141, Ajmer 158, Gauhati 116 and Calcutta 360. In almost all cases everybody's living expenditure has risen by 200 per cent. The expenditure on food in Calcutta reveals a rise of over 300 per cent, fuel and lightning 100 per cent and clothing 500 per cent.

It will be interesting however to know that authorities in foreign countries have effectively controlled the inflationary spiral following the last World War, e.g., wholesale prices index rose from 100 in 1939 to 189 in 1947 in U.K. and from 79 in 1926 to 152 in U.S.A., while the cost of living index increased in U.K. from 101 in 1939 to 131 in 1946 and in U.S.A. from 101 in 1939 to 159 in 1947.

The price of gold in India has gone up from Rs. 37 in 1939 to about Rs. 115 in 1949 and of silver from Rs. 45 in 1939 to Rs. 175 at present.

Prices of gilt-edged securities and industrial equities have exhibited similar upward trends. Thus for example Government securities Index has risen from 100 in 1939 to 106·8 after touching 111·3 in 1946, whereas all other variable yield securities show an increase from 100 in 1939 to 207·3 to-day, after breaking at one time the peak of 450 in the middle of 1946. We however know that the present recession in this sphere of economic life is rather unusual due to special factors.

It is therefore perfectly clear that inflation is writ large in our present economic set-up. One is naturally curious to know how this has happened in our country. Inflation fundamentally implies surplus purchasing power in the country relative to the availability of commodities. In India inflation originated from the decision of the Government of India during last war to continue issuing paper currency against deposits of sterling by His Majesty's Government in London to cover their war purchases and other war expenditures in India. The expenditure thus incurred totalled about Rs. 1,740 crores which being added to the continued war budget deficits showed an aggregate of Rs. 2,535 crores. This was however decreased by Rs. 1,236 crores on account of subscriptions to Defence Loans and small savings to Rs. 1,299 crores, which represented the inflationary gap, and this was covered by the issue of new currency. As this was not followed by corresponding increases in the supply of goods, India was faced with a crisis of continually rising prices. The vacuum between the expansion of currency and the declining volume of production along with reduced imports of consumers' goods continued to persist and the currency expansion was particularly large during 1947. The total note issue in June of 1948 stood at Rs. 1350·94 crores, out of which Rs. 1319·86 crores were in circulation against Rs. 182·36 crores in 1938-39. This means that the total volume of currency in circulation is nearly up by 724 per cent as compared with the pre-war figures. Out of this aggregate, deposits of the Central Government accounted for Rs. 220·03 crores, other Government accounts Rs. 21·19 crores and Banks 100·90 crores. It therefore means that there are now about Rs. 864·22 crores in the hands of the people as compared with Rs. 150·52 crores in the pre-war period of 1938-39.

Looking at the supply of consumers' goods, it will be clearly evident that this has lagged far behind the increase in monetary supplies and consequently prices have exhibited an all-round rise with concomitant ills.

The supplies of consumers' goods flow from local production and foreign imports.

Industrial production to-day does not show much improvement as compared with the pre-war period and is actually less than what it was in 1945-46. If we take 1939 August equal to 100, the

combined index number of industrial production stands to-day only at 105·8. The rise in cotton industry is from 100 in 1939 to 152·2 in 1948-49, jute 115·8, steel ingots 138·4, pig iron 94·2, cement 103·9, paper 128 and coal 130·7.

Agricultural production has neither increased proportionately and food deficits have been met in this country by large imports. The acreage under rice in 1942-43 stood at 79,052,000 acres, compared with 58,909,000 acres in 1938-39, wheat 35,305,000 acres (26,847,000 acres) and total acreage of foodgrains (cereals only) 212,036,000 acres (167,307,000 acres). Total production of rice in 1942-43 was 26,594,000 tons, compared with 19,548,000 tons in 1938-39, wheat 11,242,000 tons (7,279,000 tons) and total cereals 58,726,000 tons (43,835,000 tons). The picture becomes more complete if we look at the progress of other categories of agricultural production. The area sown under foodgrains was shown at 260,480,000 acres in 1945-46, compared with 198,009,000 acres in 1938-39, oilseeds 24,509,000 acres (22,872,000 acres), cotton 14,480,000 acres (17,796,000 acres), jute 2,422,000 acres (889,000 acres) sugarcane 3,847,000 acres and tobacco 1,220,000 acres (938,000 acres).

The total volume of imports has neither proportionately increased. Although imports rose from Rs. 151·88 crores in 1938-39 to 398·09 crores, import price index also increased from 67 in 1938-39 to 177 in 1946-47. So there is little improvement in the total volume of net imports.

Although a large volume of money is chasing a shorter supply of goods, we should not overemphasise the monetary side of inflation. It should be clearly understood that the excess purchasing power in the context of the present situation is purely relative to the existing volume of consumers' goods. It may be useful to observe that we have in India only Rs. 40·8 circulating per individual, whereas there are Rs. 526·9 in U.S.A. and Rs. 369·1 in U.K. In applying any correctives to the present malaise, we must remember that the problem is essentially one of poor production. It is no doubt true that present hardships can be partly relieved by reducing the volume of money in circulation, we must proceed in this direction with utmost care and attention, because the monetary mechanism is an extremely tender plant. As our real objective is to secure full employment and ensure maximum well-being of the masses, the real remedy consists in increasing overall production in the country.

It is gratifying to observe that the Government of India have announced their determination to fight inflation and have already made known their anti-inflationary policy, which is realistic and businesslike. The Government is determined to eliminate all avoidable expenditure. Already several high level committees are working up the priorities for various schemes. Projects which can be deferred will not be proceeded with. It has also been decided that the budgetary gap between revenue and expenditure this year should be reduced as far as possible both in the Centre and the Provinces. From next year, every effort should be made to provide surplus budgets. This is indeed bold. Although the Economy Committee has been exploring possible cuts in expenditure, the presentation of a surplus budget in the near future appears to be rather difficult in view of the enormous drain on food imports, commitments in Kashmir and expenditures on refugees' account.

Small Savings drive has been intensified with wider Post Office facilities for small investment. The maximum permissible limit for investments in Postal Savings Banks has been raised from Rs. 5,000 to Rs. 10,000 and in National Savings Certificates from Rs. 15,000 to Rs. 25,000. The Government have also been issuing Treasury Deposit Receipts on favourable terms for 6, 9 and 12 months to cater for institutional investors seeking short term investments.

The progress of the Estate Duty Bill now before the Constituent Assembly will be expedited.

The Government also propose to regulate and prevent speculation in commodities. With wide powers given to the Reserve Bank of India, it may be expected to regulate bank credits according to normal requirements.

Increase of production is really the fundamental remedy. There must be a supply of sufficient consumers' goods.

In order to stimulate production it has been decided that beginning with the assessment for the year 1948-49, depreciation will be allowed on new buildings, plant and machinery set up on or after 1st April, at double the existing rate for the first five years and thereafter at the prescribed rate, subject to the condition that the total amount of depreciation does not exceed the original cost of the assets. For factories working on triple shift,

additional allowance will also be given up to the maximum of 100 per cent of the normal.

In order to promote the installation of new machinery, it has been decided that if after a period of five years the price of machinery falls below the original cost, the difference between the written-down value of the asset and the corresponding value at the reduced price will be allowed as additional depreciation.

For new industrial undertakings of specified categories which commence production within a period of three years from 1st April, 1948, exemption of income-tax will be allowed for a period of five years on the profits up to a limit of 6 per cent per annum of the capital employed in the undertaking. If in any particular case the period of three years within which production should commence proves inadequate, the Government propose to consider the question of extending it at the appropriate time. It is also proposed to scale down customs duties on imports of machinery and industrial raw materials. The business community should appreciate these gestures of goodwill and co-operate with the Governmental anti-inflationary programme.

Although it has been decided to postpone the repayment of Excess Profits Tax Deposits and of refundable E.P.T. for a further period of three years, business expansion will not suffer as the above provision will not apply if capital is utilised for financing purchases of capital goods.

The Dividend Limitation Act as an anti-inflationary measure has been of great topical interest. It is limited to public companies and provides that in future the amount distributed as dividend should be limited to the average annual amount distributed in cash in the two years ending March, 1948 or 6 per cent of the paid-up capital of the company, whichever is higher. In calculating the amount of the average dividend distributed in the past two years, adjustments will be made for any alteration in the paid-up capital. The rights of holders of preference shares will not be affected, but the return on future issue of such shares will be limited to 6 per cent. The above certainly does not clarify the position of several companies, which have increased their capital meanwhile and it is difficult to say how adjustments will be made, although the Government have reassured that if the past level of profits is maintained, investors will continue to

receive practically the same return on their capital as they have been securing hitherto. In addition there are companies which have issued only three half-years' reports in the basic two-year period, while there are others who have published only one year's accounts between April, 1946 and March, 1948. A good deal is therefore going to depend upon departmental interpretation of the Act.

The Government of India realize that, in a matter of this kind affecting hundreds of companies, the application of any single formula to regulate the distribution of dividends may result in anomalies or hardships in a few cases and that in special circumstances exceptions may have to be made. They have, therefore, taken power to do so in the Act.

A notification under the Capital Issues (Continuation of Control) Act, 1947, has also been issued under which the Government have taken power to control the issue of bonus shares in all cases to prevent any attempt to evade the provisions of this Act. Hitherto any bonus issue exceeding Rs. 5 lakhs was only regulated by the new Capital Issue Rules. Henceforth all bonus issues will be controlled under the above provision.

It is their intention to administer the new control with flexibility and fairness. Their aim is to stimulate production by strengthening industry in every possible way while securing a fair return to the investor. This dividend limitation is intended to last for two years. As a corollary to this provision, it is also necessary to put a ceiling on wage increase. Any rise in wages and salaries above a specified limit should be deferred in payment. That the Government appreciate this point of view is evident from their policy statement regarding uniformity in industrial disputes legislation. The Central Government are convinced of the imperative need for uniformity in legislation regarding industrial disputes and its application. Divergent policies and unco-ordinated action in this matter can result in embarrassing repercussions on the economy of the country at the present juncture. Alongside, therefore, of the Government's declared policy in this matter, they intend to take measures by legislation and otherwise to ensure that uniform principles will be adopted, under the overall control of the Central Government, in the reference of disputes to adjudication, and the provision for the review of

awards by a statutory authority. This is extremely reassuring for the business community, harassed by varying judgments and awards in similar industrial disputes.

Among the major bottlenecks hampering production, lack of confidence ranks pre-eminent. Confidence is a tender plant and should be carefully nursed. Private initiative should be revitalised and a revision of the present tax structure may be helpful in this direction.

Along with industrial production, there must be an all-out effort to step up agricultural production. The Grow-more-food campaign should be more vigorously and effectively pursued. As big multi-purpose projects like the Damodar Valley and Mahanadi will take time to materialise, attempts should meanwhile be made to expand cultivation with our available resources. Cultivators should be provided with scientific manures and good varieties of seeds. Fallow lands should be brought under cultivation. The refugees may be mobilised in this direction and advantages of the co-operative movement can be fruitfully utilised at this opportune moment.

Neither Industrial production nor agricultural can expand forthwith like magic as there are limitations to be reckoned with e.g., non-availability of capital goods from abroad and lack of locomotives, and so a more liberal policy should be adopted in the importation of consumers' goods.

There is no denying the fact that profiteering and black-marketing have made the inflationary problem worse in this country. Control and rationing should be introduced in all essential commodities of life e.g., food, fuel, sugar, cement, steel and cloth. No measure is likely to succeed, unless there is a general lowering down of the cost of living. It will be extremely useful to remember, that controls failed in the past essentially due to bureaucratic corruption and incompetence. So utmost vigilance should be exercised in administering new systems of controls. Every anti-social activity must be ruthlessly dealt with. Tax-dodging in the past also added to the inflationary spiral and every Government should tighten all belts to stop leakages.

The following interesting tables are reproduced:—

TABLE I

INDEX NUMBERS OF WHOLESALE PRICES AND SECURITY PRICES

Average of Weeks	WHOLESALE PRICES (GENERAL PURPOSE) Year ended August, 1939 = 100						SECURITY PRICES 1927-28 = 100		
							Government Securities	INDUSTRIAL SECURITIES	
	Food Articles	Industrial Raw Materials	Semi-manufactured Articles	Manufactured Articles	Miscellaneous	General Index		Fixed Yield	Variable Yield
1946-47	270·3	316·3	242·2				120·4	197·8	268·6
1947-48	306·1	377·5	261·6	286·4	456·2	308·2	117·2	169·9	191·9
February 1948	348·5	404·8	293·9	321·1	429·5	342·3	116·8*	169·4	181·7
March „	347·1	397·7	285·8	324·3	448·7	340·7	116·5*	167·4	178·0
April „	348·8	414·6	299·8	325·8	478·5	347·9	114·3*	162·2	170·8
May „	357·6	442·3	317·9	351·0	504·2	367·2	114·9*	161·2	173·3
June „	377·1	451·5	323·4	370·1	520·0	382·2	114·5*	160·6	168·9
July „	390·7	449·9	338·2	370·2	537·3	389 6	114·7*	159·2	164·9
August „	397·7	438·1	330·7	353·0	532·6	382·9	114·9*	157·3	167·3
September „	396·6	435·1	340·2	348·1	531·1	382·3	115·0*	157·1	163·0
October „	393·1	435·7	340·3	347·7	547·8	381·7	115·1*	157·6	162·6
November „	394·1	440·3	340·9	346·0	548·0	382·2	114·8*	157·1	158·1
December „	397·5	457·7	328·3	347·5	536·7	383·6	114·8*	155·9	157·9
January 1949	385·3	456·6	324·8	339·2	530·2	376·1	114·7*	153·7	156·7
February „	383·8	457·3	322·1	330·1	524·3	372·0	114·4*	150·7	153·3
March „	376·5	462·8	322·5	329·4	515·2	370·2	114·3*	149·7	152·0
April „	373·8	462·8	325·2	347·0	528·5	376·1	113·9	148·3	145·8

* Estimated.

TABLE II

INDEX NUMBERS OF RETAIL PRICES IN RURAL CENTRES

Base: 1944=100

	All Food Articles			Fuel and Lighting			Clothing			Miscellaneous		
	Maibang	Nana	Krishna	Maibang	Nana	Krishna	Maibang	Nana	Krishna	Maibang	Nana	Krishna
Average of Months 1946-47 ..	104	159	139	96	108	124	86	116	93	97	134	183
Average of Months 1947-48 ..	127	203	169	101	116	141	108	110	...	98	158	...
October 1947 ..	129	217	178	102	121	137	104	108	108	84	162	135
November „ ..	131	225	174	102	123	141	104	108	141	90	162	135
December „ ..	128	226	171	95	126	133	104	108	172	97	162	155
January 1948 ..	129	217	172	92	126	133	133	108	155	99	162	172
February „ ..	137	206	172	92	122	133	159	108	...	95	162	...
March „ ..	131	192	144	92	113	146	159	118	...	103	162	...
April „ ..	128	209	146	98	110	146	161	141	172	102	164	160
May „ ..	130	219	144	106	121	146	170	163	172	103	164	160
June „ ..	134	221	144	107	125	143	171	163	172	110	174	173
July „ ..	136	218	144	107	122	144	168	162	172	100	193	160
August „ ..	144	221	144	107	124	146	154	162	172	103	187	164
September „ ..	147	231	145	107	126	149	155	163	172	99	187	160
October „ ..	144	245	144	107	129	149	145	162	172	98	187	160
November „ ..	142	245	...	107	130	...	142	162	...	99	187	214
December „ ..	142	247	179	107	132	159	131	132	187	100	190	214

TABLE III

INDEX NUMBERS OF COST OF LIVING (WORKING CLASS)

	Base: August 1939=100							Base: 1944=100					
	Bombay Province			United Provinces	Central Provinces		Madras Province	Delhi Province	Ajmer-Merwara Province	Bihar Province		Assam Province	Orissa Province
	Bombay	Ahmedabad	Sholapur	Kanpur	Nagpur	Jubbulpore	Madras	Delhi	Ajmer	Jharia	Jamshedpur	Gauhati	Cuttack
Average of Months 1946-47	252	291	303	338	292	310	246	110	122	126	107	89	109
Average of Months 1947-48	268	303	349	389	329	333	289	124	160	144	127	101	119
October 1947 ..	282	316	359	420	331	335	285	128	171	160	138	100	119
November " ..	273	316	362	413	330	335	291	132	178	153	134	104	118
December " ..	271	299	341	389	330	332	305	128	178	152	132	106	123
January 1948 ..	258	290	330	405	341	339	312	125	167	148	131	104	124
February " ..	262	293	363	391	348	352	308	125	161	138	127	105	124
March " ..	270	297	385	375	353	352	309	120	156	138	131	106	123
April " ..	277	310	386	379	358	356	307	125	154	142	130	109	128
May " ..	278	327	396	442	375	391	311	136	160	151	137	115	130
June " ..	292	336	412	462	379	404	312	141	158	155	138	116	135
July " ..	297	344	423	516	385	391	320	140	156	160	139	119	140
August " ..	306	355	419	534	380	396	321	140	160	164	140	121	141
September " ..	308	356	423	558	383	401	317	135	167	164	138	126	142
October " ..	300	362	419	547	386	405	316	136	173	165	139	128	142
November " ..	302	364	421	534	387	409	317	136	164	158	141	127	141

Price Controls in India

Prices of commodities in India disclosed an upward tendency on the outbreak of World War II and the Government stepped in to control prices, but the measures adopted by the Government being half-hearted proved abortive in practice. Powers were delegated in September, 1939, to the provincial Governments to fix maximum prices of certain selected necessaries of life so that they did not exceed the pre-war prices by more than 10 per cent, but in practice prices rose sharply despite Governmental efforts, because the Provincial Governments had no authority to execute their decisions. Then after a temporary set-back, prices disclosed a continued rise and reached giddy heights by the end of 1941. The Central Government therefore deemed it proper to adopt the policy of fixing maximum wholesale prices of certain staple commodities on an all-India basis, but the experiment in wheat soon showed that while by issuing Ordinances the Government could fix prices, the problem of enforcing the prices so fixed had still to be tackled. After the fixation of wholesale prices of wheat, the commodity disappeared from the open market and was sold in the black market at continually rising prices. It also encouraged hoarding in anticipation of better prices. The Government was ultimately obliged to decontrol wheat and suffered a serious moral defeat on this control front. After this the Government confined its activities to threats and warnings, which were unheeded.

The next stage in the evolution of price control policy was the grant of powers to the provinces to fix maximum retail prices of certain selected commodities and they were also empowered to compel merchants to declare their stocks, to introduce a system of licensed dealers, to undertake a drive against hoarding and to arrange for the sale of certain commodities through the agency of the Government shops. The Central Government became the co-ordinating agency in securing supplies to deficit areas from surplus provinces. In order to minimise the pressure on transport, the country was sub-divided into a few major regions, each of which was expected to be self-sufficient regarding food requirements.

Although the new policy partly appreciated the necessity of controlling distribution as a necessary adjunct to price control, the policy was defective in several respects. Different maxima

were fixed by provinces, even for several districts within a province. The administrative machinery which was entrusted with the task of execution was inefficient and corrupt and in consequence almost all controlled commodities went underground and consumers had to buy them from black market at fancy prices. The situation in regard to staple commodities worsened, owing to lack of inter-provincial co-ordination. Surplus areas were reluctant to sell to deficit areas at reasonable prices and in consequence Bengal, Bombay and Madras were confronted with famine, starvation and death. The situation was rendered worse by lack of transport. An inefficient and corrupt bureaucracy entrusted with the task of procuring and distributing supplies deepened the malady further and the distress of the population was unlimited.

After a period of chaos, certain reliefs began to emanate from the Government measures, which showed gradual improvement. The Government subsequently attempted to control demand by prohibiting certain uses to which certain specified articles might be put, licensing certain other uses and rationing essential commodities like food grains and kerosene in important urban areas. Measures were adopted in some provinces to increase production, improve procurement, and provide reliable distributing centres run by, or under the control of, the Government. Controls were imposed on petrol, kerosene, sugar, paper, jute—raw and manufactured, raw cotton and cotton cloth. The problem of cotton cloth control presented serious complications, because the production and distribution of cloth involved a variegated process. So far the Government attempted to control cloth prices by imposing controls on production and distribution, leaving the demand free. This was possible because during this period, the cloth shortage was due not to scarcity in an absolute sense, but owing to large scale hoarding. The authorities were able to reduce prices substantially by licensing all dealers, wholesale and retail, fixing and stamping ex-mill retail prices on each piece of cloth, restricting the holding of stocks, requiring compulsory returns of unsold stock, etc. Offenders were severely dealt with by cancelling licences, freezing stocks and in certain cases the Government assumed the control of cloth mills.

A large variety of goods however escaped control until the issue of the Hoarding and Profiteering Prevention Ordinance of

sation caused by this malady is very serious. Invariably epidemics follow in the wake of famines and take a heavy toll of deaths, because the people who live in semi-starvation lose powers of resistance. The survivors lose health, vigour and efficiency. Food famines are often accompanied by fodder famines, which destroy the cattle resources. Famines therefore cut at the root of our agriculture. With diminished purchasing power in the rural areas, industries and trade suffer. Public finance is disorganised as revenues decline, while expenditures mount up.

History of Famine Reliefs :—Severe famines occurred in 1291, 1555 and 1630 and during those days, reliefs were essentially local in character due to lack of communication and were in consequence partial and ineffective. Central granaries at the capitals which were maintained as war-chests used to be utilised to feed the starving population during famines. The construction of public works e.g., canals, tanks, roads, the erection of temples and mosques and the building of ports or places at public expense gave employment to the people in order to mitigate distress. Kings occasionally practised private charity to relieve sufferings.

During the regime of the East India Company, famines took place in 1770, 1784, 1802, 1824 and 1837 and there was widespread devastation and no mentionable measure of relief was undertaken. Motivated by the selfish instinct of exploiting the country, the East India Company paid no attention to the suffering of the people. The East India Company was pre-occupied with political manouvring and made huge profits, while the inhabitants of the land died of starvation in large numbers. During the end of its regime, the East India Company vaguely acknowledged its responsibility in the matter of famines and adopted only half-hearted measures e.g., regulation of prices and trade in corn, construction of public works and encouragement of emigration. The lack of a defined famine policy was an outstanding feature of the East India Company's rule.

The evolution of a proper system of famine relief, insurance and prevention began after 1858 through a period of trials and errors. Notable among famines were those of north-west India in 1860, of Orissa in 1865, of Rajputana in 1868, of Bihar in 1873, of South India in 1876 and the two widespread famines of 1896-1900 which affected various parts of India, including Bombay,

Madras and Central Provinces. The Orissa famine of 1865 affected five crores of people and was responsible for a heavy mortality exceeding ten lakhs. The great loss of life led to an inquiry presided over by Sir John Campbell and the Government undertook to save life at any cost. The Government pursued a policy of indiscriminate charity and excessive expenditure in the Bihar famine of 1873. The South India famine of 1876-8 caused a mortality of 52 lakhs. This led to the appointment of the first Famine Commission presided over by Sir Richard Strachey. The Government adopted certain measures on the recommendations of this commission and these formed the basis of the subsequent elaborate machinery of famine relief. The Government introduced in 1878 a Famine Insurance Grant by which a sum of Rs. 1½ crores was provided in the annual budget of the Government of India to be spent on direct relief if there was a famine and on the construction of public works of a protective nature if the year was normal. The transport system was expanded through the 'new guaranteed railways'. Famine relief measures were defined to include provision of work to the able-bodied at a wage sufficient to secure health but not ordinary comforts, and gratuitous relief to the infirm in their own villages or in poor-houses. Provision was made for giving assistance to the land-owning classes through takkavi loans and suspension and remission of land revenue. Famine codes embodying these principles were drafted for every province. These codes were subsequently modified due to experiences gained in the famines of 1896-7 and 1899-1900. The famine of 1896-97 led to the appointment of a Commission presided over by Sir James Lyall and it recommended for the relief of special classes like weavers and hill tribes, proposed rules for the management of charitable funds and advocated a freer grant of gratuitous relief in villages. The extension of decentralised relief works was however not favoured. The Maharaja of Jaipur donated Rs. 16 lakhs in 1900 to constitute the nucleus of the Indian Peoples' Famine Trust which is used to help the poor from the superior classes who cannot accept Government relief in the ordinary way. The Famine Commission of 1901 under Sir Antony Macdonell stressed the importance of 'moral strategy' or 'putting heart into the people'. The people should be helped by loans and other means immediately if danger is apprehended, prompt and liberal distribution of takkavi, early suspension of land

revenue, and a policy of 'prudent boldness' involving a large programme of relief, constant vigilance and full enlistment of non-official support. The Commission also urged the necessity of tackling effectively a fodder famine to save cattle. It recommended the large-scale introduction of co-operative credit societies and extension of State irrigation works of a protective character. The subsequent famine codes embodying these principles were extremely helpful in mitigating the horrors of the famine of United Provinces in 1907, Ahmednagar in 1912 and of the severe scarcity of 1918 and 1920. The Great Bengal Famine of 1943 ranks among major tragedies in the history of the country. It is estimated that about a million and a half of the population succumbed to this awful catastrophe for no fault of theirs. It was a man-made famine, which was preventible. The crisis followed the bungling of both the Central and Provincial Governments, although the latter stood eminently liable for inactivity, corruption and mal-administration. The Government of India appointed an Enquiry Commission under Sir John Woodhead and it poignantly remarked "society together with its organs failed to protect its weaker members. Indeed, there was a moral and social break-down as well as administrative break-down". The Commission rightly concluded that the state is ultimately responsible for providing its members with food.

The famine relief measures of the Government have been elaborately worked out. Preparations are always ready on a large scale to meet any contingency. Climatic conditions are carefully studied and statistics are collected regarding crops, prices, births and deaths. The country is mapped out into relief circles and reserves of tools and plants are stocked. Relief works on a large scale are kept in hand. As soon as rains fail, the Government keeps a close watch on the situation and tries to analyse symptoms like price rises, unemployment, increases in crimes, etc. When the Government sees the danger signal, it declares its general policy. The suspension of revenue is announced, loans for agriculture are extended, meetings are organised to explain policies of the state and efforts are made to enlist non-official co-operation. The inspection of villages is made and registers of helpless persons are compiled. After these preliminaries are done, relief works begin. Test works are first started and if response is encouraging, actual relief works as laid down in famine codes are started.

Relief camps are usually instituted from December in order to render gratuitous relief to the people. Village kitchens are run and poor-houses are maintained in towns. Large relief works are closed down with the advent of rains and people are moved back to small relief centres near villages in order to make them ready to begin their normal agricultural work at an early date. Liberal financial assistance is provided to enable people to start cultivation. Then the relief works are gradually closed down after the autumn crop is ripe and gratuitous relief comes to an end. It may be observed that the medical staff works throughout to prevent the growth of epidemic diseases.

Despite elaborate relief works, the scourge of famine will not be eliminated unless there is an overall rise in the general standard of living through an increase in National Dividend.

Unemployment in India

Unemployment in India should be studied in regard to rural and urban areas. As the majority of our population live in villages and depend upon agriculture, the rural aspect of employment is of supreme importance in this country. Cultivators in India normally have no work from five to nine months during the year and then their services could be usefully utilised by the development of cottage industries.

Unemployment in rural areas takes a serious turn when rains fail and there is a failure of crops, resulting in famines.

Unemployment in urban areas may be examined under two principal categories, e.g., unemployment amongst industrial workers and educated middle-class. Regarding industrial workers in India, there is negligible unemployment and effects of such unemployment are often mitigated by the fact that any unemployed industrial worker automatically returns to his village home, because most of the industrial workers have close contacts with villages. The impact of industrial unemployment is thus spontaneously shifted back to rural areas. As a matter of fact it is often alleged that in India the question of industrial unemployment does not really arise, because Indian industries are handicapped by lack of workers.

The middle-class unemployment has been assuming rather serious dimensions in recent years. There is a large number of people who have obtained a certain standard of education and remain without any occupation. They are normally absorbed in clerical or non-manual jobs. Between 1924 and 1928 a series of investigations were conducted through specially appointed committees in some of the Provinces e.g., Bengal, Madras, Bombay and Punjab and also in some of the Indian States like Travancore. Among the most recent committees were those appointed by the United Provinces Government in 1939 under the chairmanship of Sir Tej Bahadur Sapru, and by the Bihar Government in 1937. All the investigations clearly show that there is a large volume of unemployment among this class, which discloses a rising tendency. This kind of unemployment among the educated class involves not only a huge waste of human resources and untold sufferings, but is also a potential menace to the political stability of the country. The Sadler Commission rightly remarked that "The existence and the steady increase of a short of intellectual proletariat, not without reasonable grievances, forms a menace to good Government especially in a country where the small educated class is alone vocal. It must be an equal menace whatever form the Government may assume. So long as the great mass of the nation's intelligent manhood is driven, in ever-increasing numbers, along the same, often unfruitful course of study, which creates expectations that cannot be fulfilled, and actually unfits those who pursue it from undertaking many useful occupations necessary for the welfare of the country, any Government, however it may be constituted, whether it be bureaucratic or popular, must find its work hampered by an unceasing stream of criticism and a natural demand for relief which cannot possibly be met." The present subversive activities throughout the country fully illustrate the dangers of such unemployment.

Although the Government of India has been attempting to mitigate the evils of such unemployment by trying to find jobs through the mechanism of Employment Exchanges, the disease requires a far more radical cure. In order to remedy the evils of unemployment, it is necessary to change the educational systems in a way that the people may be so trained as to be absorbed in industrial and other vocational occupations.

The following tables regarding employment are reproduced:

FACTORY EMPLOYMENT

(In thousands)

	Government and Local fund Factories							
	Total	Clothing	Dockyards	Engineering General	Railway workshop	Ordnance factories	Mints	Rest
1938	122	2	4	8	55	23	2	28
1939	132	2	5	8	56	31	2	29
1940	169	9	7	8	61	50	3	31
1941	220	19	8	10	69	76	4	33
1942	300	29	10	16	90	113	5	37
1943	356	29	13	22	102	131	7	52
1944	420	25	14	30	122	158	8	64
1945	457	23	13	39	117	186	7	73
1946	306	5	12	25	102	103	4	53
1947	257	3	9	18	107	75	5	41

	Other Factories							
		Perennial						
	Total	Total	Textiles	Engineering	Minerals and metals	Food, drink & tobacco	Chemicals and dyes, etc.	Paper and printing
1938	1,616	1,321	839	143	52	87	55	42
1939	1,619	1,329	817	148	55	97	56	44
1940	1,675	1,380	829	159	62	104	57	46
1941	1,936	1,631	953	204	76	120	71	48
1942	1,982	1,682	965	224	82	121	73	49
1943	2,080	1,783	1,002	254	93	125	83	51
1944	2,102	1,807	993	265	91	132	89	53
1945	2,009	1,910	1,011	270	125	152	100	57
1946	2,186	1,757	982	215	84	151	96	55
1947	1,978	1,755	995	207	87	136	98	61

FACTORY EMPLOYMENT—*contd.*

(In thousands)

	Perennial—*contd.*				Seasonal			
	Wood, stone & glass	Gins and presses	Skins and hides	Rest	Total	Food, drink & tobacco	Gins and presses	Rest
1938	46	27	12	18	295	149	144	2
1939	52	26	13	20	289	150	137	2
1940	59	23	18	22	295	157	136	2
1941	78	22	24	35	305	160	142	3
1942	82	17	30	38	301	162	135	4
1943	90	15	34	37	298	168	126	4
1944	96	15	35	38	295	162	128	4
1945	101	16	36	41	276	157	113	6
1946	91	17	30	36	252	157	89	6
1947	90	17	29	34	223	160	61	2

MINING LABOUR

(Numbers)

	Total	Coal	Iron ore	Copper	Manganese ore	Mica	Petroleum	Others
1939	311,695	201,989	8,855	3,092	27,452	32,111	6,351	31,845
1940	333,942	209,173	10,118	3,614	35,159	36,641	5,746	33,491
1941	355,522	218,280	10,162	3,634	30,350	48,908	7,585	36,603
1942	364,525	215,086	10,332	3,730	32,214	56,891	6,879	39,393
1943	356,467	213,096	9,347	3,999	24,271	61,460	7,106	37,188
1944	372,253	255,364	8,166	4,030	15,797	47,245	7,305	34,346
1945	392,746	294,902	6,883	3,359	9,580	38,208	6,456	33,358
1946	417,023	323,992	7,043	3,757	10,659	32,940	4,304	34,328
1947	411,541	321,537	6,655	3,961	15,092	31,656	4,278	28,362

EMPLOYMENT EXCHANGES

	Registrations during the month	No. placed in employment	No. on register at the end of the month	No. of vacancies outstanding
1948 January	61,702	16,571	233,568	64,959
February	50,835	17,153	216,551	65,178
March	58,203	17,652	211,540	65,704
April	63,851	18,581	212,869	72,333
May	68,808	21,126	210,302	91,368
June	93,907	25,379	219,714	88,427
July	87,610	27,200	226,449	84,476
August	81,993	27,069	232,738	66,145
September	80,253	26,816	236,368	60,361
October	66,303	18,535	230,727	56,855
November	70,533	19,568	228,938	55,043
December	84,916	24,164	239,033	55,131
1949 January	89,158	24,327	251,200	55,950
February	74,680	23,311	249,581	34,779

Pakistan :—In order to tackle the problem of unemployment the scope of the employment exchanges, which were previously concerned with the re-employment and resettlement of ex-servicemen only, was increased. Their scope now includes:

1. The registration and subsequent resettlement of refugees who are in need of assistance in finding employment.

2. The registration and re-employment of ex-servicemen, technical and other essential personnel.

3. The assistance to employers in finding suitable men, and in particular in enabling them to fill the vacancies caused by the departure of the non-Muslim staff.

4. The adjustment and absorption in alternative employment of the surplus staff of the Government.

There are 23 employment exchanges in Pakistan and distributed as follows:

Sind	4
Baluchistan	1
West Punjab	10
N.W.F.P.	3
East Bengal	4
Central Exchange (H.Q.)	1
TOTAL	23

Total number registered 2,88,297.

Total number placed on jobs 93,134.

It is proposed to increase the number of these employment exchanges in Pakistan from 23 to 28, with a view to making the service available to a larger proportion of the population. The long-term plans include the covering of the whole of the country by a network of employment exchanges with an office in each district and important tehsil or sub-division with the following objects:

1. To give Pakistan an integrated nation-wide employment service.

2. To eliminate the evils of jobbers and middlemen from which the recruitment of labour suffers at present, by providing an impartial service to both employers and workers.

3. To help industry in obtaining skilled labour and technicians.

4. To help in the location of industry by giving data regarding supply of labour to prospective industrialists.

5. To increase the efficiency of labour by promoting its regional and occupational mobility.

6. To prepare a man-power budget for the nation, so that the best use may be made of the available resources.

7. To help in the mobilisation of total man-power in the event of a national emergency.

8. To help workers to raise their standard of living by introducing and administering a scheme of social insurance.

APPENDIX I

NEW INDO-PAKISTAN TRADE AGREEMENT

The Government of India and Pakistan have ratified the trade agreement signed between them on June 24 at Karachi for the mutual supply of certain essential commodities for the year 1949-50. The agreement will remain in force for a year from June 29th.

Under the agreement, the Government of Pakistan will export to India five items, namely, 450,000 lakhs bales of cotton, 2,700,000 pieces of hides and skins, 4 million bales of raw jute, 15,000 tons of rape and mustard seed and 2 million maunds of rock salt.

Half of the raw cotton will have to be purchased by India by the end of February and the balance by the end of August next year.

The two Governments have agreed to grant export and import licences at least up to the quantitative or monetary limits for the commodities to be supplied under the agreement. The schedules containing the list of articles may be altered, extended or supplemented by mutual agreement, during the time the agreement is in force.

Both countries have undertaken not to re-export to any other country any commodity obtained from the other in the form in which it was imported.

The two Governments will promote contacts between the trade interests of the two countries. They have undertaken to give every reasonable facility for the import and export of commodities.

In order to implement the agreement in a smooth and orderly way the two Governments will exchange monthly progress reports and arrange meetings between representatives of the two countries during alternate months.

India will, under the agreement, supply 23 items, namely: 150,000 bales of mill-made cloth, 100,000 bales of cotton yarn, 150,000 yards of canvas, 2,047,000 tons of coal, 50,000 tons of jute

manufactures, 5,670 tons of chemicals, 71,000 tons of edible vegetable oils including vanaspati, 2,500 tons of paints and varnishes, 6,000 tons of linseed oil, 10,000 tons of hard wood, 2,500 tons of bauxite, 2 million maunds of sea salt, 64,000 tons of steel, 16,000 tons of pig iron, 500 tons of electrical steel sheets, 7,500,000 cubic feet of pitching stone and ballast, 5,000 tons of washing soap, 2,500 tons of asbestos cement, 2 million lbs. of tobacco, 2,000 tons of myrobalans, 100 tons of ferro-silicon, 100 tons of ferro-manganese, and Rs. 2,50,000 worth of railway stores.

India and Pakistan have also agreed to extend, with certain modifications, the Payments Agreement up to June 30th 1950. The agreement provides that there shall be no exchange control between the two countries.

Under the agreement reached between India and Pakistan for the extension of the Payments Agreement up to June 30, 1950, the limit for holding each other's currencies remains the same, namely, Rs. 15 crores. The modification, it appears, relates to the payment by way of sterling over and above the limit. If the balance of payment exceeds the Rs. 15-crore limit, under the new agreement, excess up to Rs. 20 crores will be paid in free sterling. According to the previous agreement, the first Rs. 10 crores exceeding the Rs. 15-crore limit was to be paid in free sterling and further excess in blocked sterling. In the new agreement, no mention is said to have been made about the blocked sterling which possibly indicates the desire on the part of both countries not to allow the balance of trade to exceed Rs. 35 crores. It is, therefore, surmised that a machinery is likely to be set up to see that the flow of trade is regulated accordingly.

APPENDIX II

LABOUR WELFARE IN PAKISTAN

Recently, the Pakistan Government has established a Directorate of Seamen's Welfare. It is expected to direct, control, supervise and co-ordinate seamen's welfare work at the Pakistan ports and of Pakistani seamen at foreign ports. Seamen's Welfare Officers have been appointed at the ports of Karachi and Chittagong.

The Welfare Officers are expected to interest themselves in the health, recreation, club and hostel facilities for seamen, and in the provision of amenities both ashore and afloat.

The Government has also appointed a Merchant Navy Welfare Fund Committee to control grants from the above Fund to the various charitable organisations and welfare committees which are engaged in welfare work for seamen.

Organisations of Capital :—There is not a single organisation which may be regarded as fully representative of capital for the whole of Pakistan. There are, however, certain organisations such as the Muslim Chamber of Commerce, Chittagong, the Indian Merchant's Association, Karachi, the Buyers' and Shippers' Chamber, Karachi, the Muslim Chamber of Commerce, Karachi, and the Muslim Chamber of Commerce, Labore, which represent certain sectional interests only. The Government has been nominating representatives of some of these organisations to represent capital in the various National and International Conferences.

AREA AND YIELD OF PRINCIPAL CROPS IN PAKISTAN
(Area—Lakh acres ; Yield—Lakh tons)

	Eastern Pakistan		Western Pakistan		Total	
	Area (1)	Yield (2)	Area (3)	Yield (4)	Area (5)	Yield (6)
1. Rice	20·6	74·3	24·2	9·9	230·9	84·2
2. Wheat	0·7	0·2	106·7	32·4	107·4	32·6
3 Gram	1·8	0·4	29·2	6·6	31·0	7·0
4. Sugarcane ...	2·6	3·9	4·0	4·8	6·6	8·7
5. Jawar	—	—	11·4	2·4	11·4	2·4
6. Bajra	—	—	23·9	4·7	23·9	4·7
7. Barley	·8	·2	4·5	1·4	5·3	1·6
8. Maize	·1	·4	10·0	4·26	10·1	4·3
9. Tobacco ...	1·4	·6	·6	·3	2·0	·9
10. Tea	·8	·2	—	—	·8	·2
11. Rape & Mustard ...	4·3	·7	9·9	1·8	14·2	2·5
12. Linseed	·8	·1	—	—	·8	·1
13. Sesamum (Til) ...	1·4	·3	·6	·1	2·0	·4
14. Cotton*	·9	·2*	32·3	13·9	33·2	14·1*
15. Jute*	18·2	62·9*	—	—	18·2	62·9*

* In bales of 400 lbs. each.

ESTIMATE OF POPULATION IN 1948

East Pakistan	46,720,000
Beluchistan (Districts)	560,000
N.-W. F. Province (Districts)	3,200,000
Sind	5,180,000
West Punjab	19,740,000
Bahawalpur State	1,480,000
Other States	3,380,000
Total Population of Pakistan ...	80,260,000

AREA OF PAKISTAN IN SQ. MILES

East Bengal	49,270
Sylhet District	4,650
Total for East Pakistan ...	53,920
Baluchistan (Districts)	54,460
North-West Frontier Province (Districts) ...	14,260
Sind	48,140
West Punjab	62,000
Bahawalpur State	17,500
Baluchistan States	79,500
Khairpur State	6,000
N.-W. F. P. States	25,000
Total for West Pakistan ...	306,860
Total for Pakistan ...	360,780

LIVESTOCK (*in lakhs*)

	Eastern Pakistan	Western Pakistan	Total Pakistan
Bovine—			
Cattle	113·1	89·9	203·0
Buffaloes	5·4	48·5	53·9
TOTAL ...	118·5	138·4	256·9

	Eastern Pakistan	Western Pakistan	Total Pakistan
Non-Bovine—			
Sheep . . .	3·0	45·5	48·5
Goats	32·7	45·2	77·9
TOTAL ...	35·7	90·7	126·4
Horses and Ponies ...	...	6·0	6·0
Mules and Donkeys ...	...	12·8	12·8
Camels	.	4·0	4·0
Poultry	234·6	62·9	297·5

APPENDIX III

STATEMENT OF THE QUANTITY AND DESCRIPTION OF THE PRODUCTS OF DISTILLERIES AND BREWERIES IN INDIA.

Description	Twelve months, April to March 1947-48 L. P. Gallons	1946-47 L. P. Gallons
I. Distilleries(a):		
1. Country spirit—		
(*i*) Plain	8,833,417	11,175,030
(*ii*) Spiced	553,258	768,289
(*iii*) Sophisticated ...	143,702	175,139
2. Indian made "Foreign" spirit—		
(*i*) Brandy	277,881	298,689
(*ii*) Whisky	187,244	269,397
(*iii*) Rum	261,892	447,506
(*iv*) Gin	80,304	95,403
(*v*) Other sorts ...	35,793	33,328
3. Rectified (including rerectified) spirit	2,438,724	1,869,411
4. Denatured spirit	2,815,378	3,067,735

II. Breweries(b):		
1. Ale—		
(*i*) Indian Beer ...	490,431	2,407,779
(*ii*) Beer brewed on English principles ...	1,114,710	1,394,129
2. Porter	...	...
3. Stout	1,248	18,196

(a) Figures represent actual quantity issued.
(b) Figures represent actual production as measured at the producing plant.

STATEMENT OF THE QUANTITY AND DESCRIPTION OF PAINTS MANUFACTURED IN INDIA

Description	Twelve months, April to March 1947-48 Cwts.	1946-47 Cwts.
Dry Colours	204,975	176,224
Paste Paints	134,205	154,801
Mixed Paints	241,030	235,847
Enamels	26,639	19,443
Varnishes	79,968	91,120
Oils (excluding Raw Linseed Oil) ...	91,859	74,244
TOTAL ...	778,676	751,679

STATEMENT OF THE QUANTITY AND DESCRIPTION OF WHEAT FLOUR MILLED IN INDIA

(In Bazar Maunds of 82 $\frac{7}{18}$ lbs. each)

Description	Twelve months, April to Marc 1947-48 Mds.	1946-47 Mds.
Flour	348,932	836,496
Atta		
High grade	4,176,047	5,708,634
Low grade	586,080	1,093,077
Bran	354,687	675,026
Soojee	21,239	49,571
Others	40,869	39,765
TOTAL ...	5,527,854	8,402,569

APPENDIX IV

INDIA

The Devaluation of the Indian Rupee :—The devaluation of the pound, the rupee and sundry other currencies, and the subsequent fixation of their gold and dollar exchange parities at levels approximately thirty per cent lower than those which obtained up to 18th September, 1949, was a formal recognition that the economic strength of a not unimportant sector of world trade has been gravely impaired in the struggle to achieve post-war recovery. The Indian rupee was made equivalent to 21 U.S. cents as against the former rate of 30·225 cents, a devaluation in terms of U.S. dollars equal to approximately 30 per cent. Indian goods in dollar areas were made cheaper by 30 per cent, while prices of dollar goods in the Indian markets were raised by about 43 per cent. The Indian rupee however remained unchanged at 1*s.* 6*d.*

Although India's continued adverse balances of trade to the extent of over Rs. 150 crores a year, a high cost of living index around 380, lower industrial output and lack of the formation of capital called for a revision in the value of the rupee, India was practically left with no other alternative than to devalue the rupee, when nearly all members of the Sterling Block decided to devalue their currencies. India's chief trade consists with sterling countries, and the finances of the country are closely linked to sterling due to our large sterling balances.

The Government of India decided to devalue the rupee in order to obtain an equilibrum in the country's balance of payments by expanding exports and reducing imports. The Government of India also announced at that time that there would be no further imports of food from the dollar area during the year. Although devaluation deprived India of the advantage of falling food prices in the U.S.A., India will have to explore sterling areas for her food imports, and she must adopt measures in order to end her precarious dependence on foreign countries for food as early as possible.

A

The trend of economic events since devaluation discloses that the country has materially gained, and has fortunately been able to steer clear of many dangers inherent in devaluation. The following table illustrates that the balances of trade have been revealing continued improvements. Imports have declined, while exports have increased to both sterling and dollar areas.

Early effects of devaluation on India's export trade are shown in a comparison of exports in January and February, 1950, with the corresponding period in 1949. It is understood that the total value of exports in the first two months of last year was approximately Rs. 72 crores, of which Rs. 20 crores went to hard currency areas. In January-February, 1950, export earnings amounted to Rs. 91·5 crores, with Rs. 30 crores going to hard currency countries. The increase in the rupee value of exports to hard currency countries was therefore 50 per cent.

An analysis of the principal commodities shows that in 1950 sharp declines were recorded in raw jute exports (Rs. 4½ crores in January-February, 1949, against Rs. ½ crore in 1950) and a 30 per cent. decline in tea (from Rs. 16 crores to Rs. 11 crores).

Commodities which remained more or less at the January-February 1949 level included jute manufactures, raw hides and skins, and ground-nut and linseed oils.

Substantial increases were registered by cotton piecegoods (Rs. 5 crores for January-February, 1950, against Rs. 14 crores in the first two months of last year), raw cotton and waste (Rs. 3 crores to Rs. 6 crores), tanned hides and skins (Rs. 1½ crores to Rs. 3½ crores), groundnut kernel (Rs. ½ crore to Rs. 5 crores), spices (Rs. 2 crores to Rs. 4½ crores) and manganese ore (Rs. ½ crore to Rs. 1½ crores).

Coir manufactures, cashewnuts, lac, mica, tobacco, linseed and raw wool registered small increases.

Pakistan's Non-devaluation :—The exchange advantage obtained through devaluation was considerably whittled down by the decision of the Government of Pakistan not to devalue, because India depends upon the latter for the supplies of two basic raw materials, namely, jute and cotton.

The explanation offered by the Pakistan Government for its decision not to devalue has centred round two main points, first, the country does not suffer from a fundamental disequilibrium in

its balance of payments; and secondly, its export trade which is mostly in raw materials is incapable of appreciable expansion by the device of devaluation. In arriving at its decision the government has particularly considered the necessity for reducing the cost of living and maintaining conditions favourable to the development of the country which calls for large imports of capital goods and raw materials from foreign countries. There might be other considerations, partly psychological and partly business and financial, influencing Pakistan's decision. It might have resulted from sense of injured pride or from a temptation to prove the superiority of its own currency over the Indian rupee. It might perhaps have been due to a desire to gain an advantage over India by making her pay more for her cotton and jute and by herself paying less for India's dues.

Since partition, Pakistan has maintained a policy of balanced budgets. During the year ended June 30, 1949 the aggregate value of Pakistan's sea-borne trade in private merchandise with countries other than India was Rs. 168·93 crores. Exports amounted to Rs. 81·37 crores and imports to Rs. 87·5 crores, giving an unfavourable balance with countries other than India of Rs. 6·20 crores. Pakistan's favourable balance with India during the same period totalled Rs. 24·70 crores, which accounts for an over-all favourable balance. Pakistan also does not suffer from a dollar deficit as India. During 1948 the values of Pakistan's imports from and exports to the United States were $17,08,000 and $37,440,000, showing a net surplus of $20,432,000. It is this existence of a dollar surplus that must have primarily influenced her decision.

The rates which have been fixed are Rs. 100 Pakistan equal to Rs. 144 Indian, and Rs. 100 Indian equal to Rs. 69·50 Pakistan. One Pakistan rupee is given a sterling value 2 shillings 1·9 pence.

The Pakistan Government have also sanctioned the issue of Rs. 54·29 crores worth of Pakistan Government securities to the State Bank of Pakistan to counter-balance the 30 per cent depreciation, as a result of the devaluation in the value of the sterling and Government of India securities held by the bank.

So far as Pakistan is concerned it has never been seriously disputed that maintenance of the Pakistani rupee at its present rate was possible only so long as world trends were favourable to the producer of primary commodities, and for some time it has been evident that the picture is changing. The problem of farm

three annas in the rate for incomes ranging from Rs. 10,000 to Rs. 15,000 a year; and raising of the exemption limit for the undivided family from Rs. 5,000 to Rs. 6,000.

Super-tax :—Reduction of the maximum rate from ten annas in the rupee for unearned income, and nine annas for earned income, to a uniform rate of eight and one half annas on incomes of Rs. 1·5 lakhs or more.

Dividend Limitation :—The Dividend Limitation Act will not be renewed when it expires at the end of March.

Business Profits Tax :—This tax will be abolished.

Corporation Tax :—Increase from two to two and one half annas.

Postage :—Reduction in rate for local delivery of letters from two annas to one anna, and in rate for local delivery of postcards from nine to six pies.

Telegrams :—Reduction in basic minimum charge for ordinary telegrams from nine to eight annas, and for express telegrams from one rupee and two annas to one rupee.

Telephones :—Reduction in maximum trunk call rate (for three minutes) from Rs. 16 to Rs. 12 for one ordinary call, and from Rs. 32 to Rs. 24 for urgent calls; and slight extension of period in which trunk calls can be made at concessional rate.

Revised estimates for the current year show that revenue (Rs. 332·36 crores) falls short of expenditure (Rs. 336·10 crores) by Rs. 3·74 crores which will be the deficit for 1949-50. In the coming year it is hoped to realise a small surplus of Rs. 1·31 crores by setting estimated revenue at Rs. 339·19 crores against estimated expenditure of Rs. 337·88 crores. The estimates of expenditure for 1950-51 are slightly in excess of the year 1949-50, and with outlay on the Defence Services running at Rs. 170·06 crores this year, Rs. 168·01 crores next year the country's military budget still appropriates approximately half of the total revenue and expenditure. This is apart from capital expenditure on Defence which is reduced from Rs. 12 crores in the current year to Rs. 8·15 crores in 1950-51. Under present circumstances it is not easy to see how a reduction in Defence expenditure can be obtained, but the token cut in the recurring items of the Defence budget and the larger one on capital account can be taken as an earnest of Government's intention to

reduce Defence costs as and when the opportunity occurs. The lower expenditure on food subsidies in the coming year—Rs. 21 crores as against Rs. 29·67 crores in 1949-50—is welcomed, particularly as it should reflect some saving of foreign exchange, but as a book-keeping item the saving is almost wholly offset by the cost to Central revenues of the integration of the former States' finances, which leaves the Government of India out of pocket by Rs. 9½ crores. Though the taxation and other concessions to the public will cost the exchequer a nett Rs. 8·37 crores in 1950-51 (reducing a potential surplus of Rs. 9·62 crores at the old rates of tax, etc., to Rs. 1·31 crores) the estimates for the coming year for the detailed heads of revenue show considerable buoyancy. Some drop in Customs receipts (Rs. 106·54 crores against Rs. 120·43 crores in 1949-50) is naturally to be expected in view of the stringent import controls, but Union Excise is expected to bring in Rs. 71·55 crores against Rs. 69·19 crores previously, while at the new rates income-tax and corporation tax are estimated to realise Rs. 167·72 crores against Rs. 149 crores for 1949-50, the cost of the concessions falling on the Centre and the States in about equal proportions. It is noteworthy that even at the lower rate of tax the Finance Minister expects better collections, and probably he has in view the likelihood of enhanced receipts through the work of the Income-Tax Investigation Commission.

Expenditure on capital account is undergoing progressive reduction. In the current year the original budget allotment for capital expenditure has been reduced from Rs. 95 crores to Rs. 75 crores, whilst next year the amount is further reduced to Rs. 62 crores, of which Rs. 36·84 crores represents expenditure on revenue earning departments or schemes likely to be productive, Rs. 7·37 crores on schemes of State trading and Rs. 9·59 on capital grants to States. Rs. 43 crores is budgeted for loans and advances. During the coming year Government of India borrowings by way of public loans are expected to be of the order of Rs. 75 crores. In the current year neither public loans nor small savings have reached the modest targets which were set, and in the coming year net receipts of small savings have been estimated at Rs. 28 crores.

Regarding India's balance of payments position, the country's main foreign exchange reserves, which stood at Rs. 1,537 crores

at the end of June, 1948, declined to Rs. 820 crores at the end of June, 1949, a drop of Rs. 717 crores. To this figure should be added the sterling equivalent of the dollar purchases made during this period from the International Monetary Fund, amounting approximately to Rs. 19 crores, giving a total external payment of Rs. 736 crores. This heavy outgo is due to a number of factors. The first is the payment to the United Kingdom Government of Rs. 296 crores in accordance with the agreement reached in July, 1948, for the purchase of annuities for financing the payment of sterling pensions and for the acquisition of installations and stores left behind in India during the war. The second is the payment of about Rs. 187 crores to the State Bank of Pakistan towards her share of the balances following the separation of Pakistan's currency from that of India. These two special payments amounted to Rs. 483 crores. The remaining amount of Rs. 253 crores represents payments on current transactions, mostly on account of the heavy adverse balance of trade which was caused by increased imports and a small recession in exports, particularly during the first six months of 1949. This large adverse balance in payments during the period from July, 1948, to June, 1949, led to an overdrawal of about £81 million from the sterling balances. The sterling balance agreement of July, 1949, regularised this overdrawal and provided for an increase in the annual release for the year 1949-50 and 1950-51 from the original figure of £40 million, as agreed to in July, 1948, to £50 million. Further, the new agreement provided for a special release of £50 million for 1949-50 to finance the imports that might be made during this year against commitments entered into by trade before the liberal import policy was reversed.

RURAL BANKING IN INDIA

The Reserve Bank's Rural Banking Enquiry Committee is investigating the possibilities of developing rural banking in India, which has acquired a new importance with the gradual shift of income from the industrial and commercial to the agricultural groups. So far, it is suggested, the commercial banks have seen no prospect of receiving deposits in rural areas, and any such arrangement would be uneconomically expensive. The tendency in rural areas is to borrow from banks rather than deposit savings

with them, and the rates of interest offered by co-operative banks give no prospect of developing this business because people, able to save, prefer to lend to needy neighbours at rates of interest far higher than can be offered by any bank or post office.

The Provincial and States Governments have not yet taken measures to develop the countryside and create conditions for the extension of banking facilities, although the organisation of central markets had gone some way in this direction and its fuller development would obviate unnecessary cross-transport and increase farm income. This, however, was a major project and could be carried out only by the Government in co-operation with the co-operative banks or commercial banks having branches in rural areas. The Reserve Bank's agricultural credit department has not yet made any complete survey of conditions in rural areas, but the total wealth of exchangeable materials produced in the country has been estimated in terms of present prices at up to Rs. 5,000 crores which if exchanged a very few times would mean a turnover of Rs. 20,000 crores in the process of which the Internal trade has no advantage of banking facilities. Although the commercial banks have not found it possible to venture into the interior immense possibilities are seen if impediments like transport bottlenecks and restrictions on working hours are removed.

Although the rural population is largely illiterate and conservative it is suggested that this difficulty can be overcome if banking arrangements are made. An important role for the co-operative banks, and also commercial banks, is seen in making advances against deposits. Receipts against deposits of agricultural produce should be capable of being discounted at a basis of from 75 per cent. to 80 per cent. with local co-operative banks, which in turn should be able to re-discount with commercial banks under a Government guarantee. The importance of an attractive rate of interest is emphasised, and in view of the dangers of too rapid expansion of branch banking it is suggested that prior permission of the Reserve Bank should be necessary before any commercial bank opens a new branch. Improved facilities for remittances and the transfer of funds are considered essential, with a reorganisation of the co-operative banking movement to correct the over-emphasis on its credit side. These banks should make special efforts to mobilise village savings and finance their organisation at least partly from their own funds; and more use should be

made of Post Offices to collect rural savings where there are no bank branches. Mobile banks are also considered worth a trial. It has also been suggested that wherever possible the cash work of Governments should be done through a bank rather than through Treasuries or Sub-Treasuries as a matter of convenience and expedition.

DESHMUKH'S FINANCIAL AWARD

Sir Chintaman Deshmukh, who was asked by the Central Government last December to inquire into and determine the allocation of the Provincial share of income-tax and of the export duty on jute, has completed his task, and the Government has implemented his award as from the 1st April. The Provincial share of income-tax has been allocated as follows:—

	per cent.
Madras	17·5
Bombay	21
West Bengal	13·5
Uttar Pradesh	18
Bihar	12·5
Madhya Pradesh	6
Punjab	5·5
Assam	3
Orissa	3

Sir Chintaman is also reported to have decided that the grants payable under Article 273 of the Constitution to the Provinces now sharing the jute export duty, in lieu of their shares, should be:—

	In lakhs of Rs.
West Bengal	105
Assam	40
Bihar	35
Orissa	5

The allocation of income-tax does not take into account the former Indian States merged in the former Provinces. The problem of financial adjustments between the Centre and the Provinces in which these States have been merged is under separate examination by the Government of India.

It has been announced that Sir Chintaman's aim was to determine the shares to be taken from Bengal, the Punjab, and Assam in respect of the parts of those States now included in Assam, and to re-allocate the "lapsed percentages" among the other Indian States. West Bengal and the Punjab clearly deserved special consideration as border States which have been particularly hard hit by partition; and West Bengal in particular, apart from containing many of the country's vital industries, has the special problems of India's biggest city with a population vastly swollen by refugees and where the enforcement of law and order is no easy task. A West Bengal Government spokesman is reported to have criticised the award, but largely for the reason common to all the States, the need for increased funds to implement development programmes.

It should be remembered, however, that this is an interim award unlikely to last more than two years, and a news agency message from New Delhi forecasts that the Finance Commission to be appointed under the new Constitution will be formed this year and will make a "comprehensive readjustment" of the entire question of the States' shares of income-tax. An interesting feature of the Government communique announcing the award, incidentally, was the statement that the allocation "does not take into account the former Indian States merged in the former Provinces. The problem of financial adjustment between the Centre and the Provinces in which these States have been merged is under separate examination by the Government of India".

REGROUPING OF THE RAILWAYS

The Government of India has released for public comment the scheme of regrouping of railways which was promised in the last Railway Budget speech. Although, this seems a diversion of effort from measures to increase safety on railways and has been criticised as such in some quarters, there is little doubt that rationalisation will now be generally welcome, because it ceased to be a controversial issue about a year and a half ago. The Kunzru Committee, reporting in November, 1948, did not oppose the principle of regrouping but merely recommended postponement of the issue for five years on grounds of expediency. The

integration of the railway systems of the princely States with the Indian Government Railways as a consolidated whole, in two instalments namely from 1st August, 1949 and April 1, 1950, removed the main argument of that Committee for continuance of the "status quo"; its second reason for postponement—the amount of dislocation and transitional readjustments that were bound to be involved in regrouping at any time—was less convincing and amalgamation cannot now be regarded as a premature measure of reform. On the other hand, the Wedgwood Committee's recommendation against over-centralisation arising from unwieldy units is of some relevance, though the Committee did not indicate what might be considered as an optimum size. The Railway Ministry's tentative plan of regrouping is now to be spread over a reasonable period of time obviating any serious dislocation; and its division of India's 34,000 miles of railways into six regional groups is in accordance with the standard of a minimum mileage of 5,000 for a railway system according to accepted standards in most western countries.

It is obvious that the present railway administrations, which have their roots in company ownership and management, have evolved in a haphazard manner without proper regard to their functions as components of the country's transportation system. The main justification for the proposed regrouping lies in the scope it would provide for reducing the existing diversity to administration which is in no way conducive to efficient working. The distribution of the railway systems on a zonal basis into six groups should secure other advantages than uniformity and should be judged by the extent to which they are helpful in bringing about efficiency in operation and economy in management.

The six groups are intended to cater more effectively to the needs of a compact region in each case and, except for the line from Banaras to Allahabad belonging to the Northern Railway, the jurisdictions of the six proposed groups do not overlap. The proposed Northern Railway will cover the Punjab, P.E.P.S.U. and a major part of Uttar Pradesh; it is to include the whole of the E. P. Railway, portions of the E. I. Railway, a portion of the metre gauge of the B. B. and C. I. Railway, a segment of the O. T. Railway (West of Chupra) serving the smallest area among the six zones. These proposed additions to the E.P.R. would repair the damage done to railways of the Punjab by partition and make

it a more economical unit for management. The basic difficulties of the E. P. Railway with regard to workshops and stores depot facilities can now be remedied and the management will pass from the control of a Chief Administrative Officer to that of a General Manager.

The Western Railway, which is to consist of the fragmented State Railways of Rajasthan, Saurashtra and Kutch will probably benefit most by the new grouping and it is good that this opportunity for amalgamation has arisen before the development of the port of Kandla. The large volume of traffic diverted to Bombay after the loss of Karachi will be routed through this area when the Kandla project is completed. The importance of this zone will be further enhanced by the fact that, along with the Northern Railway, it will have to serve the strategic needs of the frontier.

The Central Railway will cover a smaller territory than some of the other groups such as the Eastern Railway, but from the standpoint of density of traffic it assumes great importance. The industrial areas of major significance covering important centres—like Bombay, Sholapur and Ahmedabad—lie within the jurisdiction of this group; it also provides an alternative route for the transport of imported goods to North India via Bombay.

The proposed Southern Railway including the entire S. I. Railway, the entire Mysore State Railway and the major portion of the M. and S. M. Railway would serve the entire needs of the lower peninsula and can bring about an amalgamation of the administration with much less reshuffling than is necessary in the other groups. The Eastern Railway will serve extensive portions of Hyderabad State, Madhya Pradesh, parts of Bihar, the whole of Orissa excluding the coal-bearing area which has been allocated to the sixth Group. The North Eastern Railway will thus have a heavier responsibility as it will include besides coal, the areas from which jute will have to be supplied to Calcutta mills and the voluminous traffic passing through the port of Calcutta will have to be handled. A small segment of this railway, lying in the extreme west and projecting into an important part of U.P. connecting Moghal Sarai with Allahabad, Kanpur and Lucknow, should in the ordinary course have formed part of the Northern Railway, but the justification for the separation seems to be the convenience of routing coal traffic to upcountry centres after temporary pooling in transit at Moghal Sarai. The incorporation

of the Assam Railway in this group was decided on grounds of geographical contiguity.

The case for amalgamation and regrouping is based on the need for re-alignments of railway administration with the broad divisions of the country from the traffic point of view and for securing efficiency through uniformity and co-ordination through large-scale operation.

De-protection of the Sugar Industry :—According to the recommendations of the Indian Tariff Board, the Government of India has de-protected the sugar industry to the extent that the existing protective duty will for the time being be converted into a revenue duty. It is asserted that eighteen years' protection has created a state of complacency on the part of Government, the industry and the cultivator, none of whom has taken adequate steps to improve the over-all efficiency and bring down the cost of production. Protection to the sugar industry lapsed at midnight on 31st March, 1950.

The whole question including last autumn's sugar muddle, has been carefully examined by the Indian Tariff Board. The President of the Board, Mr. G. L. Mehta, in a speech on 28th November, 1949, gave some indication of the Board's attitude. He said that "in spite of protection, the sugar industry has not developed on a planned basis, its costs of production are high and its prices are completely out of parity with world prices of sugar. The yield of cane per acre and the sugar contents of the cane remain low as compared to the levels of efficiency attained in other sugar producing countries." He recalled the Tariff Board's observations in 1938 that "the object of protection is the industrial development of the country and, if it is to be successful, it should not result in the benefit to a few capitalists and should not lead to the establishment of any kind of monopoly."

Judging from recent experience of the sugar industry it has resulted in both. In other words, the basic object of protection has been frustrated and the industry is now being called to put its house in order and prove its usefulness to the country. As Mr. Mehta asserted, "we want not merely increased production but also increased efficiency, which is equivalent to a reduction in the real cost of production." He said that "the task facing the industry is one of internal reorganisation from farm to factory and from factory to dealer".

The role of Government is the second point for criticism. It is well known that the main reason for the high cost of sugar lies in the price of cane fixed by the United Provinces and the Bihar Governments. The price of cane has gone up from annas four and pies six a maund in 1939-40 to Rs. 2 a maund in 1947-48 and Rs. 1-10-9 at present. In other words, the cost of cane has gone up from thirty-six per cent. of the whole in 1939-40 to sixty-six point five per cent. at present. Let Mr. Mehta speak again. He said: "I feel that in a matter of this kind the responsibility should be that of the Central Government, particularly because the cost of production as a whole is determined by the cost of production in the United Provinces and Bihar and the consumers all over India have to bear the burden of protection."

Another element which goes to increase the cost of production is the cane cess levied by the States Governments. Since its imposition ten years ago this cess has brought in Rs. 8,41,63,000 to the United Provinces Government and Rs. 2,97,04,000 to the Bihar Government. Out of this sum the United Provinces spent Rs. 1,72,22,000 and Bihar Rs. 1,44,88,000 on cane improvement. In other words, during ten years a sum of Rs. 8,21,65,000 was carried to general revenues by these two Governments from a tax levied on the all-India consumer. It is suggested that the amount of this cess should be reduced from annas three to anna one and pies six a maund, to be exclusively used for the intensive cultivation of sugarcane.

Four more issues require a decision. They relate to (*i*) Central control over prices and distribution, (*ii*) sugar imports, (*iii*) the future of the Sugar Syndicate and (*iv*) the sugar muddle of last October. As indicated by Mr. Mehta, Central control over prices and distribution is likely to continue. It is suggested that the present ban on the import of sugar should be lifted as a reasonable quantity of sugar imports would do no harm to the industry. The Tariff Board has categorically recommended that there should be no ban on the import of sugar.

The Government of India's own communique is cited in connection with the Sugar Syndicate. The communique said "the Sugar Syndicate has not been able to function in a rising market in a manner consistent with the public interest". It is suggested that the Governments of the United Provinces and Bihar should

withdraw their recognition by rescinding the provisions in their laws requiring all mills to become members of the Syndicate. So far as the sugar muddle is concerned there are indications that a public investigation will be instituted, with particular reference to the alleged smuggling of sugar into Pakistan. How the current year's production of 10,00,900 tons plus 1·3 lakh tons carry-over vanished and a scarcity appeared within a few weeks requires careful scrutiny.

It may be observed here that the Indian Sugar Syndicate has already taken measures to go into voluntary liquidation.

Planning Commission :—The Government of India has set up a Planning Commission. The personnel and terms of reference of the Planning Commission have been announced and the resolution making this announcement traced the origin of the Commission to the fundamental rights in the Constitution, which directed the State to secure, *inter alia*, the right of an adequate means of livelihood to every citizen and that the operation of the economic system should not result in the concentration of wealth and means of production to the common detriment.

This is not a new goal. The Linlithgow Government in a statement of industrial policy made on the 21st April, 1945, undertook to prevent excessive profits to capital and to ensure that unhealthy concentration of assets in the hands of a few persons, or of a special community, would be avoided. The Linlithgow Government claimed to reach this goal "by a judicious exercise of controls, such as capital issue control and the licensing machinery for the regionalisation of industry".

The present Government's resolution on industrial policy, issued on the 6th April, 1948, slurred over these provisions. It confined itself to a clarification of the Government's policy of nationalisation, and embodied a resolution of the Industries Conference stating that "the system of remuneration to capital, as well as labour, must be so devised that while in the interests of consumers and primary producers excessive profits should be prevented by suitable methods of taxation and otherwise, both will share the product of their common effort, after making provision for payment of fair wages to labour, a fair return on capital employed in industry, and reasonable reserves for the maintenance and expansion of the undertaking."

The objectives laid down for the Commission are essentially counsels of perfection, but there is a constitutional aspect of the resolution which needs consideration. The Prime Minister is the Chairman of the Commission. He is also the Chairman of the Cabinet to which the Commission is required to make its reports. It is conceivable that the Cabinet may differ from the recommendations of the Commission. The Prime Minister's dual role may thus be embarrassing, to himself and to the Cabinet.

The Planning Commission has been instructed to:—

(1) make an assessment of the material, capital and human resources of the country, including technical personnel, and investigate the possibilities of augmenting such of these resources as are found to be deficient in relation to the nation's requirements;

(2) formulate a plan for the most effective and balanced utilisation of the country's resources;

(3) on a determination of priorities, define the stages in which the plan should be carried out, and propose the allocation of resources for the due completion of each stage;

(4) indicate the factors which are tending to retard economic development, and determine the conditions which, in view of the current social and political situation, should be established for the successful execution of the plan;

(5) determine the nature of the machinery which will be necessary for securing the successful implementation of each stage of the plan in all its aspects;

(6) appraise from time to time the progress achieved in the execution of each stage of the plan, and recommend the adjustments of policy and measures that such appraisal may show to be necessary; and

(7) make such interim or ancillary recommendations as appear to it to be appropriate either for facilitating the discharge of the duties assigned to it; or on a consideration of the prevailing economic conditions, current policies, measures and development programmes; or on an examination of such specific problems as may be referred to it for advice by Central or State Governments.

Total Population :—The total population as estimated on March 1, 1950, under the orders issued by the President and published in the Gazette was as follows:—

Assam 8·51m, Bihar 39·41m, Bombay 32·68m, Madhya Pradesh 20·91m, Madras 54·29m, Orissa 14·41m, Punjab (I) 12·61m, Uttar Pradesh 61·62m, West Bengal 24·52m, Hyderabad 17·69m, Jammu and Kashmir 4·37m, Madhya Bharat 7·87m, Mysore 8·06m, Patiala and East Punjab States 3·32m, Rajasthan 14·69m, Saurashtra 3·96m, Travancore and Cochin 8·58m, Ajmer 0·73m, Bhopal 0·85m, Bilaspur 0·13m, Coorg 0·17m, Delhi 1·51m, Himachal Pradesh 1·08m, Cutch 0·55m, Manipur 0·5m, Tripura 0·58m, and Vindhya Pradesh 3·88m. The aggregate was thus estimated at 347·34 million. This represents an increase of 28·57 million over 1941.

National Fuel Research Institute :—Opening the National Fuel Research Institute at Digwadih, the President Dr. Prasad said that as "this Institute will work for the utilization of our coal resources in the best possible way, we can hope not only for a tremendous increase in the production of iron and steel but also a number of by-products which we now import from abroad."

While the total coal reserves of India were about 65,000 m. tons, of which 22,000 m. tons were considered workable, the output of good quality coal did not exceed 5,000 m. tons. Not all of this again was suitable for metallurgical purposes. Of the total annual output of all kinds of coal, about 13 m. tons were of metallurgical type, but only 4 m. tons were being actually used for metallurgical purposes. The position of coking coal reserves was also poor.

Coal of high volatile content other than of the metallurgical type has special uses in carbonization, by-products recovery, synthetic production of oils, gas manufacture, etc.

The coal tar industry has a great future and is equally a necessity in view of our programme of extending roads. Also a great variety of oils, high explosives, dyes, medicines, plastics, antiseptics, insecticides, germicides, etc., can be derived from coal tar. Utilization and conservation of our coal reserves are absolutely necessary in the interests of the industrial development of the country, and this will depend on our ability to improve and utilize the inferior grades of coal and develop alternative supplies of different grades of coal for industries. The by-products industry must also be developed.

The object of the Fuel Research Institute is to cover all aspects of research, both fundamental and applied, in solid, liquid and gaseous fuels, although for the present the activities of the Institute will necessarily be confined to a large extent to solid fuels. The Institute will be aided and supported in its work by five other satellite institutes in Bengal, Bihar, Vindhya Pradesh, Madhya Pradesh and Assam.

Crop Insurance in India :—A pilot scheme for crop insurance in India has been finalized by an expert committee appointed by the Government of India.

Certain areas will be selected in various parts of the country in consultation with provincial Governments for working the pilot scheme. For the present only four or five crops will be included. The committee has recommended that the entire cost of the scheme should be borne by the Government of India.

According to the scheme, the Government could enforce compulsory insurance limited to one-half of the maximum permissible benefit. The remaining part would be left to the farmer's option. Compulsion would also apply to crop holdings above a certain minima.

Indemnity will be paid to the farmer on losses incurred by crops being below average. It would also be paid for hazards beyond the control of the farmer, such as cyclones, floods or invasion by locusts. The production capacity of various "revenue class" soils will be decided by the Government by means of a crop-cutting scheme in selected areas under different conditions.

The committee also discussed a scheme for cattle insurance and a pilot scheme for this is expected to be finalized. It has before it a report submitted by Mr. G. S. Priolkar, who was appointed by the Government to work out a scheme for agricultural insurance.

of electric power in Pakistan will be increased by 160,000 to 200,000 KW. This power will be used for running the new factories which are being established all over Pakistan and for providing cheap electric power to the countryside for cottage industries and other requirements. The main schemes are the Karnafulli multi-purpose project, which should be completed in four years, the Rasul hydro-electric project, which is already far advanced and should be ready early in 1952, the Mianwali hydro-electric scheme, the Malakand and Dargai extensions, and the mammoth Warsak multi-purpose project, which will take more than five years for completion and will cost about Rs. 9½ crores, inclusive of transmission lines. This project will generate between 60,000 and 100,000 KW, and irrigate 60,000 acres of land.

The third most important head is irrigation, with schemes costing Rs. 22·16 crores. When these schemes are carried out 36·5 lakhs of acres of land will have been brought under irrigation (and again it should be remembered that this does not include the 28 lakhs of acres which are to be irrigated from the Lower Sind Barrage). The most important scheme is the Thal project, which will irrigate parts of three districts of the Punjab lying between the Indus in the west and the rivers Jhelum and Chenab in the east. The scheme is a pre-partition one, which was suspended during the war. It is expected to bring 6,93,200 acres under cultivation by the end of 1953-54, and to increase the output of foodgrains by 2 lakhs tons, of sugarcane by 9,000 tons, and of cotton by 23,000 bales. A Thal Development Authority has been set up, on T.V.A. lines, by the Punjab Government.

Agriculture occupies the next most important position, with Rs. 16·04 crores, and industry comes a bad fifth, with Rs. 7·50 crores. In the light of these figures the Pakistan Government certainly cannot be charged with failure to put first things first. The Central Government's industrial projects include the establishment of a Test House at Karachi, for testing manufactured goods for the purposes of Government contracts, and for the formulation of standards. A Branch Laboratory will be set up in East Pakistan, probably at Chittagong. An American expert has recently been in Karachi, to advise the Government.

Other Central schemes are the establishment of a paper mill in East Bengal, which has previously been reported, and the development of the woollen industry in the frontier regions of

the N.W.F.P. and Baluchistan, in the shape of a woollen spinnery at Bannu and another at Harnal in Baluchistan. Each mill will have 2,000 spindles and enough looms to cover about one third of its yarn production.

The Industrial Development Corporation Bill :—Special mention must also be made of the Pakistan Industrial Development Corporation Bill, which provides for the setting up of a statutory corporation responsible for the development of the following six key industries: jute, paper, heavy engineering, ship-building, heavy chemicals and fertilisers.

The Corporation will be entirely financed by the Government, and its Board of Directors will be appointed by the Government. The Act requires it to submit schemes, for the approval of the Government, for the establishment of the industries specified. To give effect to such schemes it will then sponsor public companies (mutually independent) which will undertake manufacturing operations in the industry concerned.

The capital structure of these companies will require the approval of the Central Government, but the idea is that the capital will be issued for public subscription; if any portion remains unsubscribed four months after the date of issue it will be subscribed by the Corporation on behalf of the Government. Later the Corporation will be at liberty to sell or transfer its own shares. With the previous sanction of the Government the Corporation is to be permitted to take loans from the International Bank for Reconstruction and Development or from other foreign sources.

Tariff Board :—Pakistan is to regulate its tariff policy through a statutory authority and an official announcement from Karachi says that the Government of Pakistan have accepted the principle that before it will admit claims for protection and assistance to industries established in Pakistan through tariff or other measures, request for such assistance should be investigated by a duly constituted tariff organisation. They have accordingly decided to set up a Tariff Commission in Pakistan to investigate such claims and make suitable recommendations to Government for protection of industries. The Tariff Commission will consist of a Chairman, one Member and a Secretary with appropriate

staff. The Tariff Commission will also keep under review the effects of protection and assistance given to industries in order to ensure that such protection and assistance is neither excessive nor so small as to be ineffective. It will also be in a position from the knowledge gained in the course of its work to advise the Government on measures for fostering industry and for securing industrial production at the most economical cost. The Commission will take action on the application by an industry seeking assistance or on a request from the Central Government. Applications for assistance made by industries should in the first place be addressed to the Ministry of Commerce.

The Oil Industry :—Pakistan's production of various petroleum products which stood at 42,000 tons in 1948 rose to 90,000 tons in 1949 and is expected to rise to 130,000 tons this year. Whilst production figures are rising, so are the demands, especially for furnace oil which accounts for 50 per cent. of Pakistan's total requirements of oil in 1950. Out of a total estimated requirement of 900,000 tons, furnace oil requirements are estimated at 450,000 tons. This increase is due largely to conversion of railway locomotives from coal-burning to oil-burning, both on the N. W. Railway and the East Bengal Railway. The requirements of these Railways have risen from 114,566 tons in the year 1948 to 321,000 tons in 1950.

Industry has also started a conversion programme of its own, but has not made such progress as the Railways, mainly on account of the heavy oil-freight now charged on furnace oil by Railways. Some time ago the surcharge of 37½ per cent. levied on furnace oil was removed and the Ministry of Communications have now accepted the view that every possible assistance should be given to industry to substitute furnace oil for coal. Railways will henceforward carry furnace oil on a freight structure under which oil is calculated to serve as a basic fuel for Pakistan industry. This should give the necessary impetus for conversion from coal to oil in industrial plants.

The increased demand for petroleum products in Pakistan has necessitated an increase in tankage at the ports and up-country centres. A large number of tank wagons is to be placed at the disposal of the industry by Railways in both wings of Pakistan to enable the free movement of oil throughout the country.

The oilfields of Punjab, which will enable Pakistan to meet about 15 per cent. of its total needs from indigenous resources, are reinforced by the oilfields of Patharia in Eastern Pakistan.

The Mardan Sugar Factory :—The 50,000-ton sugar factory at Mardan, which will be the largest in Asia, is nearly ready to go into production. It is understood that it may be handicapped, to some extent, by the poor sucrose content of the local sugar cane. In consideration of this the North West Frontier Province Government are establishing a Sugar Cane Research Station at the Government Military Farm, Mardan. This is a five-year scheme, estimated to cost Rs. 4,68,000, to which the Central Government have contributed Rs. 41,276 last year. As much as 12 per cent. of the total irrigated area of the Province is under sugarcane.

The Tanning Industry :—The tanning industry is on the up-grade in Pakistan, many Muslims connected therewith having migrated there from India, and hides and skins form a very useful item in the country's exports. Furthermore, there is a big future for the tanned leather industry. Pakistan's annual requirements are estimated at 22½ million lbs. of sole leather and 19½ million square feet of upper leather. Present production amounts to only 1½ million lbs. of the former and 1 million square feet of the latter.

To bring production up to demand the Ministry of Industries has fixed a target of 20 modern mechanical tanneries for sole leather and 25 for upper leather. There is no lack of the raw material, for it is estimated that Pakistan annually produces 800,000 buffalo hides and 4½ million cow hides. Babool bark is the main tanning material in use at present, but the South African bark is superior.

Pharmaceutical Industries :—The Government are showing some concern about the development of the pharmaceuticals, drugs and light chemicals industry. According to the Industries Ministry this has afforded the most fertile ground for the growth of bogus and unreliable mushroom concerns, whose only aim is the exploitation of public money and health. Present production is placed at about 200,000 gallons of galenicals of uncertain quality, equal to nearly half the estimated requirements. In regard to

drugs, the main item of production is ephedrine hydro-chloride at the rate of about 3,000 lbs. per annum, equal to the full demand.

The Government contemplate the setting up of three self-contained pharmaceutical units covering all branches of manufacture in Western Pakistan, and two in Eastern Pakistan. One unit is to be set up in Karachi, but the location of the other four is not yet decided.

The Tea Act:—It provides for the setting-up of a Pakistan Tea Board to promote the sale and consumption of Pakistan tea both at home and abroad, to organise and assist in tea research, and generally to take such measures as may appear advisable in the interest of the tea industry in Pakistan.

The Pakistan Tea Association is to nominate three members, and the Central Government one from among producers who are not members of that body. One member will be nominated by the Central Government on the recommendation of the Chambers of Commerce in East Bengal, and one on the recommendation of tea brokers and shippers. The East Bengal Government will be represented by one officer, though the Chairman, who may or may not be an official, will be nominated by the Central Government. There will also be two members "with special knowledge of agriculture" appointed by the Centre.

A Pakistan Tea Licensing Committee is also to be set up under the Act. It will be responsible for the control over the extension of tea cultivation and over the export of tea. It will consist of six members, including the chairman. The latter will definitely be an official, to be nominated by the Centre, and there will be one other official member nominated by the East Bengal Government. The Pakistan Tea Association will have three representatives, and one is to be nominated by estates which are not members of that Association.

A cess on all tea produced in Pakistan and exported from Pakistan will be levied at the rate of Rs. 1-6 per 100 lbs. provided that the rate may be increased by the Central Government, after consultation with the Board up to Rs. 2-8, but not higher. The proceeds of the cess will be applied by the Tea Board for financing the Tea Licensing Committee and for meeting the expenses of measures taken in fulfilment of the various objects for which the Board has been brought into being.

The Development of Chittagong Port :—The survey of the Pussur river is reported to have had very encouraging results. Deep-sea steamers will be able to go more than half the way up to Khulna to an anchorage where they will load jute. It is understood that at low water the draught will be a clear 22' feet. The channel is already buoyed, and it is proposed to station a light ship at the mouth of the river. Use of this inland anchorage should begin soon, and this will relieve the pressure on the port of Chittagong.

Pakistan's Coal Resources and Requirements :—Coal is a major factor in the present unhappy trade deadlock between India and Pakistan. Coal is as vital to Pakistan's economy as it is to that of most other countries; for despite the progress which is being made by other forms of fuel coal remains the basis of most motive, industrial and domestic power. Thermal generation of electricity is still more general than hydro-electric generation, the latter being largely confined to countries which possess abundant water supplies and are already industrially well advanced. Pakistan's dependence on coal is likely to be considerable for as long as we can foresee. With the stoppage of supplies from India she has recently turned to Poland and South Africa for imports, whilst negotiations are also said to be going on with the United Kingdom and France for additional shipments. The country's full requirements are estimated at 3½ million tons per annum, though it is calculated that she could manage without great inconvenience with a million tons less. Hitherto India supplied about 80 per cent. of Pakistan's needs under a programme of monthly despatches of 170,000 tons.

Regarding small indigenous coal industry and the prospects of developing it in the future, it appears that domestic production has varied from quarter to quarter depending on various factors. In the latter half of 1949 production in Western Pakistan averaged about 22,000 tons a month. Since India stopped her supplies, production has almost doubled itself, presumably under the stimulus of rising prices and an assured market.

Pakistan's coal has certain characteristics of its own. Compared with Indian coal, Pakistan's coal is much younger geologically and therefore less mature. It contains a higher percentage of volatile matter and a lower proportion of fixed carbon, resulting

in the quick burning of such coal. It also contains a higher percentage of sulphur. A large percentage of the coal comes out as small coal. In the past, therefore, when coal of better quality was readily available at cheaper prices, Western Pakistan's was mainly used for brick-burning. Of late, however, Pakistan's coal has been used in power houses, cement factories and ginning and other establishments. Substantial quantities are also briquetted for domestic use.

In order to help the Pakistan Government to draw up a plan for development of its coal resources an invitation was sent to a firm of well-known British consultants, Powell Duffryn Technical Services Ltd. to undertake a survey of the collieries. A party of experts from this firm visited Pakistan last year, and after inspecting all the principal coal deposits in the Punjab as also the various power plants and industrial undertakings returned to London in March, 1949. In October of the same year, the first report of the firm was received by Government. The investigations made by the firm fell under two main heads, *viz.*: those concerned with the characteristics and utilisation of coal (this work was carried out mainly in their laboratories); and work in connection with mining of coal, assessment of reserves, and fixing of targets. The Powell Duffryn estimates of the workable reserves are 165 million tons, about 77 million tons being in Baluchistan and the rest in the Punjab. They have suggested targets for development of the coal mines in various Provinces, both short-term and long-term, as below:—

Province:	Short-term Within 5 years (In tons per annum)	Long-term 6 to 10 years (In tons per annum)	
Baluchistan ...	375,000	425,000	
Punjab ...	350,000	495,000	
Sind ...	110,000	220,000	(Subject to favourable drilling results)
NWFP ...	...	8,750	

To reach these targets it is necessary to give effect to the recommendations made by the consultants and also to provide a market for the local coal.

The laboratory section of the report is of considerable technical interest and shows that the best varieties of coal come from

Baluchistan and Makerwal (Mari Indus area). Coal from the Salt Range (Khewra area) is of a more inferior quality. Sind coal, being purely lignite, has a lower calorific value than any of the other coals; but this deposit has economic possibilities due to its being comparatively close to Karachi. Practically all the Pakistan coals are non-coking, except for the Shahrigh coals of Baluchistan, which are slightly coking. It has been established, however, that some of the coals, notably those from Makerwal, contain some resin which it might pay to remove by solvent extraction. Messrs. Powell Duffryn have also recommended additional laboratory work on washing and desulphurization of selected coals, with a view to evolving a commercial process for the production of coke, gas, carbonised briquettes, by-products and processed fuel suitable for use on the railways so as to replace imported coals; and the Minister announced that they are being authorised to undertake this work. The consultants have drawn attention to the fact that in general, deposits of coal occur in thin seams in scattered situations and in disturbed terrain. Most of the seams are steeply inclined and this feature calls for special methods of extraction. They also draw attention to the friable nature of the coal, which necessitates special care in handling and processing it.

One of the most important recommendations, and one which lends itself to ready appreciation and acceptance, is that the existing scattered and jumbled mixture of small leases should be rationalised by their amalgamation or re-adjustment in order to establish colliery units of a proper size, each capable of producing between 100 and 150 tons of coal per day. The Pakistan Government have accepted this recommendation and have already given effect to it in respect of collieries in Baluchistan where some 14 working groups have been formed, apart from individual mines which do not lend themselves to grouping. The various groups have been leased out to private parties except one which has been allotted to the Coal Commissioner. This Government group consists of the mines in the Shahrigh area. A scheme for the development of this area, approved by the Development Board has been sanctioned by Government. It will cost Rs. 7½ lakhs and will be implemented with the least possible delay.

So far as the Punjab is concerned, the regrouping of the coal mine leases has also been provisionally finalised. There will be

some 20 groups in the Salt Range Area which will be leased out to companies incorporated in Pakistan. Apart from these groups, there are the trans-Indus collieries of Makerwal and Gullakhel which are the largest production units of coal in Pakistan. These are now worked by the Central Government through a Superintendent of Collieries, stationed at Mari Indus, working under the general control of the Coal Commissioner. Arrangements to modernise the power house and workshop, improve transport and other facilities in the trans-Indus Collieries are under the consideration of Government.

The second important recommendation of the consultants is to effect a rapid improvement in communications. They have called special attention to the need for improving the road joining Quetta to Spin Karez which is the natural focal point for coal mining activities in Ser Range in Baluchistan or, in the alternative, relaying the broad-gauge line which at one time connected Spin Karez to Quetta. They have also recommended better communications in the Salt Range of the Punjab.

The third important recommendation concerns the provision of power in colliery areas without which no big production of coal can be expected. It is a commentary on the relatively primitive state of the industry that at no place in Pakistan where coal is mined at present is power available except Makerwal, which has several small sets which have outlived their economic usefulness. Proposals for a Central Generating Station for this area at a cost of approximately Rs. 1½ crores have already been worked out by the Central Engineering Authority. Similar questions concerning arrangements to be made at Quetta, Mach and in Ser Range in Baluchistan are under the consideration of the C.E.A. The consultants have advised that if electric power from a Central Station is not available, collieries should be required to install small steam boilers for operating their haulages and pumps, a recommendation with which Government generally agree. Great importance is also attached to the methods of mining. The Pakistan Government will give all assistance possible to private lessees of coal mines to follow suit and implement this important recommendation. In most cases, the consultants have pointed out, development of mines is being retarded on account of the absence of qualified surveyors. They have, therefore, recommended the building up of an efficient Mine Survey Section which should be

required to undertake service on behalf of private mines on payment of prescribed fees. One other matter to which a great deal of importance is attached by Government is the establishment of a National Fuel Research Institute. Detailed proposals for the establishment of a Coal Research Institute have been made by a Czechoslovak firm at the instance of the Ministry of Industries. These proposals have been examined and accepted in broad outline. They are now under submission to the Development Board. With the establishment of this Institute, day-to-day problems as also long range problems of the indigenous coal industry will receive attention. The second report of the Powell Duffryn Technical Services Ltd. on the utilisation aspect of the local coal, is still awaited.

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